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**36th ANNUAL
NATIONAL
AGRICULTURAL**

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**OUTLOOK
CONFERENCE**

**November 17-21, 1958
Washington 25, D.C.**

Program

U.S. DEPARTMENT OF AGRICULTURE

agricultural marketing service

agricultural research service

commodity stabilization service

foreign agricultural service

forest service

federal extension service cooperating

MONDAY (November 17) MORNING

(Thomas Jefferson Auditorium - South Building)

C. M. Ferguson, Administrator
Federal Extension Service, Chairman

9:00	Registration	
9:30	Opening of Conference	Ezra T. Benson Secretary of Agriculture
9:45	National Economic Situation and Outlook	Nathan M. Koffsky, Chief Farm Income Branch Agricultural Marketing Service
10:15	Intermission	
10:30	Panel Discussion - James P. Cavin, Chief Statistical and Historical Research Branch Agricultural Marketing Service, Moderator	
	Nathan M. Koffsky Agricultural Marketing Service	John W. Lehman, Clerk Joint Economic Committee
	Louis J. Paradiso, Assistant Director-Chief Statistician Office of Business Economics Department of Commerce	William Butler, Vice President Chase National Bank, New York City
		J. A. Livingston Philadelphia Bulletin
12:30 - 2:00	Lunch Time	

AEP-234 (11-58)

MONDAY (November 17) AFTERNOON
(Thomas Jefferson Auditorium - South Building)

Bushrod W. Allin, Chairman of Outlook and Situation Board
Agricultural Marketing Service, Chairman

2:00	World Situation as it Affects the Outlook for Agriculture	Max Myers, Administrator Foreign Agricultural Service
2:30	Agricultural Outlook for 1959	Fred V. Waugh, Director Agricultural Economics Division Agricultural Marketing Service
3:15	Intermission	
3:30	Panel Discussion - Bushrod W. Allin, Moderator	
	Max Myers, Administrator Foreign Agricultural Service	George W. Campbell Extension Economist University of Arizona
	Gustave Burmeister, Assistant Administrator Agricultural Trade Policy & Analysis Foreign Agricultural Service	William M. Carroll Extension Economist Pennsylvania State University
	Faith Clark, Director Household Economics Research Division Agricultural Research Service	Karl Hobson Extension Economist State College of Washington
	Carl P. Heisig, Director Farm Economics Research Division Agricultural Marketing Service	Francis A. Kutish Extension Economist Iowa State College
	Fred V. Waugh Agricultural Marketing Service	
5:00	Adjournment	

TUESDAY (November 18) MORNING

(Thomas Jefferson Auditorium - South Building)

The Outlook for and the Impact of Resource Adjustments on Agriculture

Sherman E. Johnson, Chief Economist
Agricultural Research Service, Chairman

9:15	Prospects for Adjustments in Production and Resource Use	Hugh L. Stewart, Chief Agricultural Adjustments Research Branch Agricultural Research Service
9:45	Prospective Changes in the Structure of Farming	Kenneth L. Bachman, Asst. Director Farm Economics Research Division Agricultural Research Service
10:15	Discussion	
10:35	Intermission	
10:50	Needs and Prospects for Public Action to Facilitate Resource Adjustments	George E. Brandow, Professor Department of Agricultural Economics Pennsylvania State University
11:10	Needs and Prospects for Private Action to Facilitate Resource Adjustments	Earl O. Heady, Professor Department of Agricultural Economics & Rural Sociology Iowa State College
11:30	Panel Discussion - Sherman E. Johnson, Moderator	
	Hugh L. Stewart Agricultural Research Service	Earl O. Heady Iowa State College
	Kenneth L. Bachman Agricultural Research Service	Ronald H. Bauman Extension Economist Purdue University
	George E. Brandow Pennsylvania State University	Marion D. Thomas Extension Economist Oregon State College
12:30 - 2:00	Lunch Time	

TUESDAY (November 18) AFTERNOON

(Thomas Jefferson Auditorium - South Building)

How USDA Outlook is Developed

Richard G. Ford, Extension Economist
Agricultural Economics Division, FES, Chairman

2:00	Purpose and Scope	Bushrod W. Allin, Chairman Outlook and Situation Board Agricultural Marketing Service
2:20	Role of Agricultural Estimates	Sterling R. Newell, Director Agricultural Estimates Division Agricultural Marketing Service
2:40	Other Sources of Outlook Data	C. Kyle Randall, Head Statistical and Historical Research Branch Agricultural Marketing Service
3:00	Intermission	
3:15	Developing the General Outlook	Carroll E. Downey Farm Income Branch Agricultural Economics Division Agricultural Marketing Service
3:35	Developing the Outlook for Individual Commodities	Martin J. Gerra Statistical and Historical Research Branch Agricultural Economics Division Agricultural Marketing Service
3:55	How Outlook is Developed in my State	Leonard W. Schruben Extension Economist Kansas State College
4:15	Discussion	
5:15	Adjournment	
6:30	Home Management Specialists Dinner Little Tea House, Arlington, Virginia	

Wednesday, November 19, 1958

Commodity Outlook Sessions for Producers, Handlers and Consumers

9:15 - 11:30 Fats, Oils and Peanuts - Freer Art Gallery Auditorium
Karl G. Shoemaker, FES, Chairman
George W. Kromer, AMS, Outlook Statement

Forest Products - Room 3048 South Building
Paul O. Mohn, FES, Chairman
Dwight Hair, FS, Outlook Statement

9:15 - 10:20 Vegetables - Room 1351 South Building
R. L. Childress, FES, Chairman
Will M. Simmons, AMS, Outlook Statement

10:25 - 11:30 Potatoes - Room 1351 South Building
R. L. Childress, FES, Chairman
Will M. Simmons, AMS, Outlook Statement

11:30 - 12:45 Lunch Time

12:45 - 3:15 Food Grains (Wheat & Rice) - Room 509 Adm. Building
Thomas E. Hall, FES, Chairman
Robert E. Post, AMS, Outlook Statement

Tobacco - Room 3048 South Building
Buel F. Lanpher, FES, Chairman
Arthur G. Conover, AMS, Outlook Statement

Sugar - Room 5219 South Building
Herbert G. Folken, CSS. Chairman

3:30 - 5:15 Grass and Legume Seeds - Room 5219 South Building
Paul O. Mohn, FES, Chairman
William R. Askew, AMS, Outlook Statement

Fruits and Tree Nuts - Room 1351 South Building
Lloyd H. Davis, FES, Chairman
Ben H. Pubols, AMS, Outlook Statement

Cotton - Jefferson Auditorium
E. P. Callahan, FES, Chairman
Doris D. Rafler, AMS, Outlook Statement

5:15 Adjournment

Wednesday, November 19, 1958

Room 216 Administration Building

Family Living Sessions

Frances Scudder, Director
Division of Home Economics Programs, FES, Chairman

9:15	Food Outlook	Harry Sherr Agricultural Economics Division Agricultural Marketing Service
10:15	Housing and Durable Household Equipment Outlook	George Johnson Bureau of Labor Statistics Department of Labor
11:00	Textiles and Clothing Outlook	Harry Kahan Bureau of Labor Statistics Department of Labor
11:45 - 1:30	Lunch Time	

Planning for Intermediate and Long-Term Family Financial Adjustments

Faith Clark, Director
Household Economics Research Division, ARS, Chairman

1:30	Using Spending Patterns From Expenditure Studies as Guides	Lucile Mork Household Economics Research Division, ARS
	Income and Job-Related Expenditures of Working Wives	Emma Holmes Household Economics Research Division, ARS
	Seasonal Variations in Spending of Farm Families	Marcia Gillespie Household Economics Research Division, ARS
	Using Food Budgets in Planning	Eloise Cofer Household Economics Research Division, ARS
5:00	Adjournment	

Thursday, November 20, 1958

Commodity Outlook Sessions for Producers, Handlers and Consumers

9:15 - 12:00 Feed, Livestock and Meat - Jefferson Auditorium
Richard G. Ford, FES, Chairman
Outlook Statements: Malcolm Clough, AMS
Harold F. Breimyer, AMS

12:00 - 1:30 Lunch Time

1:30 - 3:15 Dairy - Jefferson Auditorium
Max K. Hinds, FES, Chairman
Herbert C. Kriesel, AMS, Outlook Statement

3:30 - 5:00 Poultry - Jefferson Auditorium
Homer S. Porteus, FES, Chairman
Edward Karpoff, AMS, Outlook Statement

5:00 Adjournment

Thursday, November 20, 1958

Room 216 Administration Building

Family Living Sessions

Planning for Intermediate and Long-Term Family Financial Adjustments (cont'd)

Emma Holmes, Home Economist
Household Economics Research Division, ARS, Chairman

9:15	Planning for Replacements of Durable Goods	Jean Pennock Household Economics Research Division, ARS
	Family Use of Consumer Credit	Janis Moore Household Economics Research Division, ARS
	Considerations in Developing and Using Standard Budgets	Helen H. Lamale Bureau of Labor Statistics Department of Labor

11:30 - 1:00 Lunch Time

Planning for Intermediate and Long-Term Family Financial Adjustments (cont'd)

Starley M. Hunter, Family Economics and Home Management Specialist
Division of Home Economics Programs, FES, Chairman

1:00	Guiding Family Spending Discussion	Alice H. Jones Household Economics Research Division, ARS
2:30	Meat Outlook as It Affects Families	Harold F. Breimyer, Head Livestock, Fats & Oils Section Agricultural Economics Div., AMS
	Dairy Outlook as It Affects Families	Herbert C. Kriesel, Head Dairy and Poultry Section Agricultural Economics Div., AMS

4:30 Adjournment

STATE DELEGATES PREREGISTERED FOR THE 36th OUTLOOK CONFERENCE
November 17-21, 1958

ALABAMA

Foy Helms,

ALASKA

Allan H. Mick

ARIZONA

George W. Campbell, Jean M. Stewart

ARKANSAS

Clay R. Moore, Crystol C. Tenborg

CALIFORNIA

Robert C. Rock, Mildred Novotny

COLORADO

S. Avery Bice

CONNECTICUT

George Ecker, Florence Walker

DELAWARE

W. T. McAllister, Patricia Middleton

FLORIDA

C. C. Moxley, Bonnie J. Carter

GEORGIA

J. J. Lancaster, Hilda Dailey
Paul C. Bunce

HAWAII

Stephen Doue

IDAHO

Wayne Robinson

ILLINOIS

L. H. Simerl, Catherine Sullivan

INDIANA

Ronald Bauman, Elkin Minter
James Stevenson, Clara Wendt

IOWA

Francis Kutish, Helen T. Sorensen

KANSAS

Leonard Schruben, Ruth Wells
Sykes Trieb

KENTUCKY

Steve Allen, Catherine Knarr
Wilmer Browning, Letta W. Jasper

LOUISIANA

W. D. Curtis, Celia Hissong

MAINE

Arling C. Hazlett, Doris D. Ladd

MARYLAND

George A. Stevens, Joanne W. Reitz

MASSACHUSETTS

Adrian H. Lindsey, Barbara Higgins

MICHIGAN

Charles L. Beer, Lucile Ketchum
John N. Ferris

MINNESOTA

Luther Pickrel, Margaret Jacobson

MISSISSIPPI

Rupert B. Johnston, Katherine Simpson

MISSOURI

Coy G. McNabb
Thomas Brown
Elmer Kiehl

MONTANA

John Bower

NEBRASKA

T. Allen Evans, Clara Leopold

NEVADA

George Myles

NEW HAMPSHIRE

Silas B. Weeks, Ann F. Beggs
Louise C. Dix

STATE DELEGATES PREREGISTERED FOR THE 36th OUTLOOK CONFERENCE (continued)
November 17-21, 1958

NEW JERSEY
Frank V. Beck, Hildreth M. Flitcraft
John T. Hunter
George T. McCloskey

NEW MEXICO
C. R. Keaton

NEW YORK
L. C. Cunningham, Leola Cooper
D. C. Goodrich, Gwen Bymers
V. B. Hart
R. B. How
C. W. Loomis
R. G. Murphy
R. S. Smith
C. E. Wright

NORTH CAROLINA
Guy Cassell, Mamie Whisnant
Clyde Weathers

NORTH DAKOTA
Harry G. Anderson, Irene Crouch

OHIO
Wallace Barr, Jr., Mabel Spray
Lyle H. Barnes

OKLAHOMA
Houston Ward, Evelyn Nantz

OREGON
M. D. Thomas

PENNSYLVANIA
Monroe Armes, Helen Bell
H. Louiee Moore
William Carroll
Wesley Kriebel

PUERTO RICO
Roberto Lefebre-Munoz
Andreita Vazquez de Reyna

RHODE ISLAND
Arthur Domike, Evelyn Lyman

SOUTH CAROLINA
M. C. Rochester, Ruby Craven

SOUTH DAKOTA
Lyle M. Bender, Isabel McGibney

TENNESSEE
Eugene Gambill, Mary Sue Mayo
Phyllis Ilett

TEXAS
John G. McHaney, Eula J. Newman

UTAH
Morris Taylor

VERMONT
Verle Houghaboom, Doris Steele

VIRGINIA
James B. Bell, Ocie J. O'Brien
D. U. Livermore
K. E. Loope
W. J. Nuckolls, Jr.
Harold W. Walker

WASHINGTON
Karl Hobson, Lila Dickerson

WEST VIRGINIA
Vernon Sheppard, Louise Knight

WISCONSIN
Gustof Peterson, Louise Young

WYOMING
Bob Frary, Alberta Johnston

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UNITED STATES DEPARTMENT OF AGRICULTURE

For P.M. Release November 17

Washington, November 15, 1958

It is a privilege to be able to welcome you to the 36th Annual National Outlook Conference. This conference, like those before it, exemplifies the important services rendered by the Department of Agriculture and those with whom it cooperates.

You will be spending the next few days discussing the economics, the statistics, the hard facts and soft guesses about the outlook for agriculture. It is not my function at this particular time to discuss farm economics and farm figures. You will get plenty of that. So, instead of discussing economics, I want to take just a few moments to discuss the importance of economic information and the vital need of your professional work.

To paraphrase what I said here three years ago, I want to emphasize that the assembling and analysis of the material to be presented to you is not easy. Neither is your job easy -- the job of getting the results of research to farmers, to marketers and consumers, thereby contributing to the welfare of all these groups -- yes, of all our people.

You dig out -- you unearth -- you supply -- facts about current and past economic situations and possible trends. And this helps people to make their own decisions about their plans for the future. This is a vital service in the successful functioning of a free economy.

As a youngster on a farm in Idaho a good many years ago, I became aware of the need farmers have for outlook information. I watched all of our neighbors make long-range plans, planting and marketing decisions, with inadequate knowledge of the economic situation -- and with inadequate knowledge of the outlook. Later, in operating my own farm, I found that reliable economic information became a pressing and a personal need for me.

Remarks by Secretary of Agriculture Ezra Taft Benson, 36th Annual National Outlook Conference, Washington, D. C., November 17, 1958, 9:30 a.m. (EST).

Still later, I worked for the Extension Service for some years in Idaho. This was a gratifying duty -- working with farmers, marketers, and consumers -- helping them improve their incomes and their standards of living. There again I was brought face to face with the need for better outlook information.

So I believe in outlook work. I believe in it very firmly. I believe that people in general, as well as farm people, need ample and accurate economic and outlook information. We must continue to do our very best to provide that information.

Nearly everyone here, whether or not employed by a government agency, is a professional worker in agriculture. And I want to take this opportunity to tell you that long ago I learned respect and admiration for the achievements of professional workers such as you. I learned this as a student of agriculture, as a livestock and dairy farmer, as a county agent, and in my work in the National Council of Farmer Cooperatives. During the nearly six years that I have been Secretary of Agriculture, I have gained even more respect and admiration for you.

I am frequently told that the relationship between the Department of Agriculture and the States is now the best it has ever been. We are very proud of the fine spirit of cooperation that exists between the States and our USDA agencies.

Now we all know that American agriculture is undergoing a technological revolution. Changes in the production, processing, and marketing of agricultural products are taking place on a massive scale. Farm families are witnessing other changes, too, as a new rural America emerges.

In a few decades, perhaps even sooner, we probably will be seeing a new agricultural community that might be described as city life widely spread. Your work on behalf of farm people makes you a participant in these changes. You aid farm people as they seek to adjust to, and understand, these changes as they occur -- and I'm talking about changes in family living and home economics, as well as in production and marketing economics.

This period of vast technological growth in American agriculture is taking place at a time when our entire economy is in a state of rapid growth and development. These changes are not confined to agriculture -- but they have tremendous impact upon agriculture.

There never was a time when knowledge -- information -- facts -- were so important to farm people as they are now.

If you are to do your job with maximum effect, you must have a broad understanding of the issues facing our agriculture. Farm people look to you for facts on all that pertains to agriculture. Economic education is as basic to the well-being of farm people as work in the physical and biological sciences. If farm people are to make the best possible decisions they need the facts -- all the facts -- upon which to base their decisions.

Economic information in the agricultural field is the brick and mortar of sound farm policy. People cannot build the sound programs they need if they lack facts in this vital area. Public policy in agriculture is the reflection of millions of individual opinions.

People cannot think in a vacuum. Without factual information, public discussion is but a pooling of ignorance.

Traditionally, professional workers have been reluctant to enter the area of public policy. You have not felt a direct responsibility in this sphere, and you have realized the dangers of getting involved in an area so controversial. But can any of us continue to disown responsibility in this critical age? Does not the possession of useful knowledge in itself involve the responsibility of sharing it with others?

There is no greater need today in agriculture than a courageous, objective presentation of the economics of farm policy. The challenge belongs to all of us -- the obligation also.

Moreover, objective work can be done in this area without becoming politically involved. Objective research can evaluate past farm programs and appraise new proposals.

I do not ask anyone of you to accept or to favor the policies and programs that I believe in. I ask only that you do not shirk the responsibility of helping farmers and the public generally to gain a true understanding of the facts involved in agricultural policies and programs.

For the welfare of America, each citizen must develop a keener sense of responsibility for the solution of public questions -- all public questions both within and outside of agriculture.

The people must think. They must discuss. They must have the courage of their convictions. They must decide on a course of action and they must follow it through. All of this must be done freely -- in the open without government dictation or control.

Our American democracy is more than the right to speak freely, to worship in the church of our choice, to receive equal justice under law.

It is a form of society in which each citizen has responsibilities. Every right has a responsibility tied to it.

We must realize that if we have the right to speak freely, then we have also the responsibility to raise our voices when the occasion demands.

So I challenge you to help farm people and the public generally to gain a true understanding of the economic facts involved in agricultural policies and programs.

We have another challenge -- a continuing one. We must from time to time take stock of ourselves, of our attitudes toward our jobs. I say this because as times change, we must change. Perhaps it would be even better if we were to help make times change -- not just be followers.

When we have worked for some time and have established that we are competent in our jobs, it is human to find it easy to carry on in a routine manner -- to continue to provide services -- to continue to do a perfectly adequate job. But is that enough? Are we going to be satisfied to coast along? I don't think so. I know that you are the kind of people who want to keep mentally on the move. There will always be new fronts of knowledge and of service and you are not going to be left behind.

You realize that we are working for and with people -- not statistics. The farm families we serve are made up of human beings -- not statistics. They have problems and aspirations, worries and achievements. Because you realize that, you have been able to make your work doubly effective.

Let us continue to remind ourselves that, however useful our figures and formulas may be, they are of real worth only as they serve to strengthen the human relationships and human values of the people we serve.

Working together, let us continue toward the goal of a free, expanding, and prosperous agriculture for our friends and neighbors, the farmers, and ranchers of this great Nation. Let our sole aim be to aid them so that they may freely participate in the fruits of the abundance they provide for all of us.

These abundant blessings have come to us through an economic system which rests largely on three pillars:

1. Free enterprise -- the right to venture -- to choose.
2. Private property -- the right to own.
3. A market economy -- the right to exchange.

Working together, we can maintain the strength of these pillars -- we must!

In no place on earth do people enjoy the standard of living which is ours. We must preserve, at any cost, our American way of life which has brought such untold blessings, comforts, and rewards to our people. This is part of our American treasure. With God's help, we will use it wisely and preserve it for the benefit of our children and our children's children.

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For P.M. Release, November 17

OPENING REMARKS

For panel discussion on the National Economic Situation and Outlook

By J. A. Livingston, Financial Editor of the Philadelphia Bulletin,
and Syndicated Columnist

At The 36th Annual National Agricultural Outlook Conference
Monday, November 17, 1958, Washington, D. C.

There's a 1929 smell, a New Era smell, in the air again.

Now that the election is over and the Democrats have won, the tendency among many professional investors and speculators is to say: The spenders are in control. Deficits will increase. Inflation is the order of the new day.

Amateurs in Wall Street say to one another: "I'm not buying stocks for their immediate yield. I don't care about dividends. I'm buying for the future." That's a bit like saying: "I'm not buying the overcoat for warmth. I merely want the wool as a hedge against inflation."

Present day confidence is too easy. We had a recession in 1948-49; we had another in 1953-54; and we're in the process of recovering from the 1957-58 recession. All of the recessions have been shallow. All have been short. The last was the shortest of the three, which made up for the fact that it was the deepest.

So people ask: Doesn't this prove that we have licked the business cycle? Doesn't this prove that we can control ups and downs in the economy? Doesn't this prove we won't go on a binge that leads to a bust?

The answer is: It doesn't.

The very argument is assurance that we'll go to excess, that we'll overplay our luck, and that we'll have a crash of some sort. As soon as a people--as a nation--assumes it's depression-proof, it becomes depression-prone. Why? Because the people--the government--stop taking those measures which prevent extreme booms which lead to extreme busts.

If the President and Congress were to assume that we'll never have another depression, then they'd spend money freely--regardless of its inflationary impact on the economy. People in Wall Street, seeing this tendency, would assume business would prosper, earnings would rise, and would bid up on stocks. As a result, the economy would become "over-anticipated."

That happened in 1929, when people said: "This is the New Era, an era of stability. We're not going to have another depression." Stocks rose to unsupportable levels on an unsupportable debt structure.

If that sentiment becomes widespread, if people buy stocks because their friends have bought stocks, because stocks are the way to get rich quick, we'll merely do what we did before. Fanaticism is to redouble your effort after you've lost sight of the goal. Buying stocks for capital gains, for profits, is to lose sight of the goal--profits and dividends. Even now, many people are making more money in the market than at their jobs. That's a bad sign. When investors and speculators lose touch with reality, when they forget the purpose of investing, there's trouble. And there have been indications that this is occurring. Brokers' letters speak of the long-term justification for buying stocks. People are rushing to buy mutual funds. Everyone wants to get into the market because it's the thing to do; because we've proved we can't have a depression.

Damon Runyon once said that where human beings are concerned the odds are nine to five against.

We can control depressions. I'm an optimist on that. But first we must control ourselves, we must control human beings. When Wall Street calls the tune for business instead of business leading Wall Street, it's time to stop, look, listen, and make sure that Wall Street knows what it's doing.

This isn't a prophecy of doom; merely a suggestion of caution, merely a recollection of that 1929 smell.

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For Release
November 17, A.M.

UNITED STATES DEPARTMENT OF AGRICULTURE

THE AGRICULTURAL OUTLOOK FOR 1959

By

Frederick V. Waugh, Agricultural Marketing Service,
Faith Clark and Carl P. Heisig, Agricultural Research Service,
and Gustave Burmeister, Foreign Agricultural Service,
at the 36th Annual Agricultural Outlook Conference,
Washington, D.C., November 17, 1958

Present indications are that net farm income in 1959 may be from 5 to 10 percent lower than in 1958, although substantially higher than in 1957. But the upward trend in land values, farm assets, and levels of farm living probably will continue.

The expected drop in farm income is not due to any prospective weakening of demand. Domestic demand is strong and improving. Nonfarm income may well set a new record high in 1959. Foreign demand is expected to about hold its own. Immediate reasons for the expected decline in income are the present indications of larger hog marketings, the discontinuance of acreage-reserve payments, and somewhat higher production expenses.

Large surpluses continue to be a difficult problem. In spite of large foreign and domestic programs to move these surpluses into consumption, the burdensome stocks of wheat and feed grains are increasing. The output of crops and livestock products in 1958 set a new high record.

Even if weather conditions next year should be less favorable, a high total output of farm products now seems likely. Larger marketings of hogs, of early vegetables, and of a few other farm products may well result in slightly lower average prices in 1959 than in 1958. In addition to the slight drop in prices, there will probably be a drop in Soil-Bank payments and a somewhat further increase in farm costs. The increase of 20 percent in net farm income from 1957 to 1958 was due partly to several unusual factors that are not likely to operate in the same direction in 1959.

Farm Income

This year, realized net farm income is up over 2 billion dollars or 20 percent above 1957. Farmers' gross income increased close to $3\frac{1}{2}$ billion dollars. There were 4 main factors: Substantial improvement in the livestock markets; record crop output, augmenting the flow of commodities to the CCC; the delayed harvests of 1957, which increased income earlier this year while lowering income last year; and some increase in Soil-Bank payments to farmers. Several of these factors will not operate in 1959.

Production expenses were up over 1 billion dollars, reflecting higher cost rates generally, but especially heavier expenses for feeder livestock and for feed.

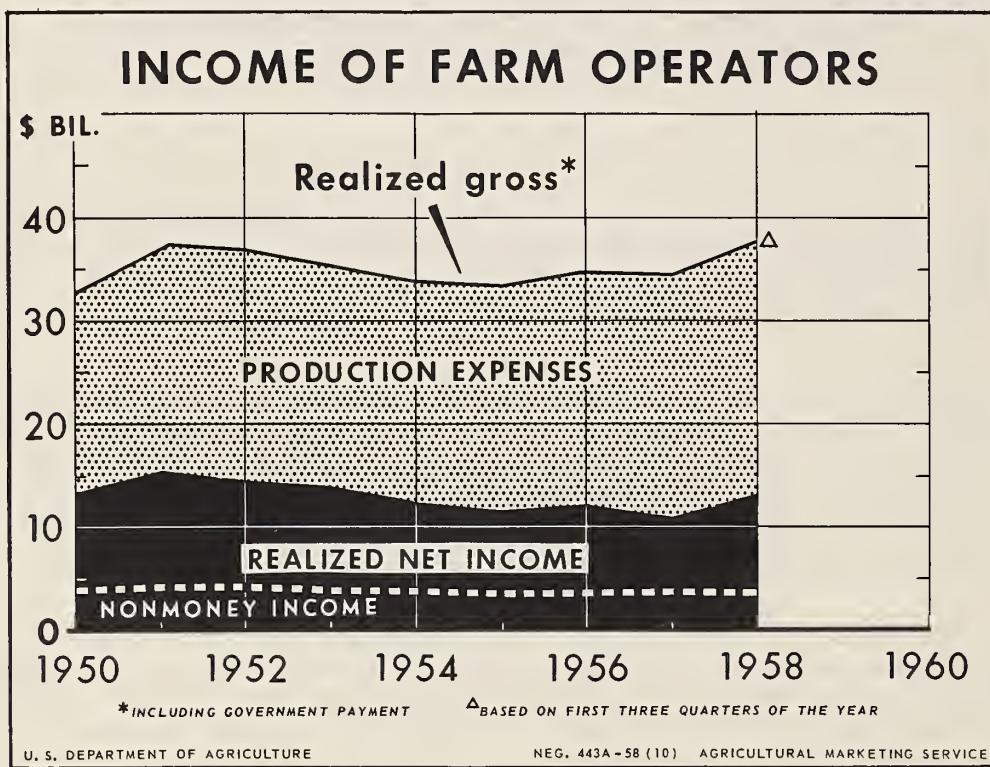


FIGURE 1

For 1959, our best estimate at this time is for a decline in realized net farm income of perhaps 5 to 10 percent. We expect an increase in the volume of marketings to maintain cash receipts even with somewhat lower average prices. Cash receipts from wheat and hogs may be smaller, but cotton receipts could be up substantially if acreage is sharply increased. Government payments to farmers will be reduced with the end of the acreage reserve of the Soil Bank this year. And production expenses will likely show a further small increase next year.

This year, per capita income of farm people from all sources may well turn out to be the highest on record. Per capita income of nonfarm people, however, was probably somewhat smaller than the record high of last year, reflecting recession in the nonfarm economy. For next year these trends may be reversed.

Prices of Farm Products

So far this year, farm prices are averaging some 6 percent higher than in 1957, and are at the best level in 5 years. In 1959, we expect prices to average a little lower than this year.

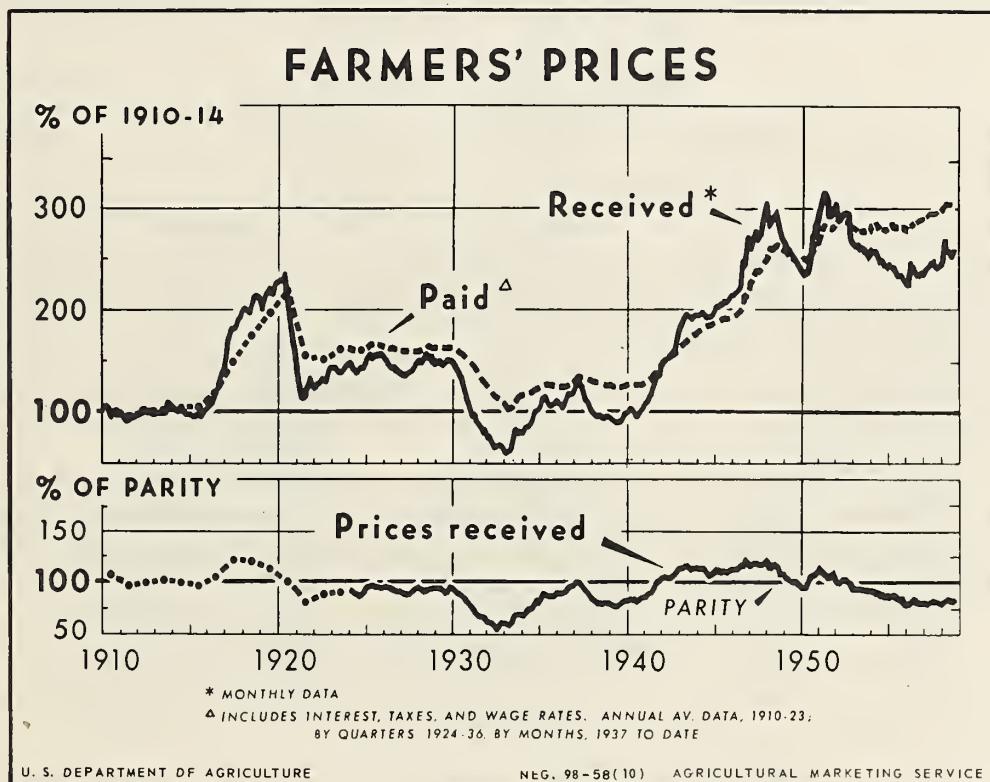


FIGURE 2

Prices of hogs and cattle are substantially higher this year than last, reflecting reduced marketings of meat animals and a strong demand for feeder cattle. In addition, freeze damage brought smaller supplies and higher prices for vegetables in the first half of the year and for citrus fruits. In general, prices of major crops which continued in surplus are lower in 1958 than in 1957.

The most important price change in view for 1959 is the prospect for substantially lower prices of hogs. In addition, increases in output of poultry and eggs will likely bring lower prices for these items in the first half of 1959 than in the first half of 1958. For basic commodities, support prices for 1959 crops may not be appreciably different than for 1958 crops. Minimum price support for 1959 crop wheat has been announced at \$1.81 per bushel compared with \$1.82 for 1958 crop. Minimum level of price support for cotton farmers who stay within their allotment will be about the same percentage of parity as for 1958 crop. Lower supports will be available to those who choose to expand acreage up to 40 percent above their allotment. If elimination of the corn allotment is voted on November 25, price supports will be lower than for the 1958 crop for the 12 percent of commercial area corn acreage which was in compliance with allotments this year. Supports for other corn producers will be somewhat higher than those available for their 1958 crop.

Demand for Farm Products

Domestic demand for farm products, now at a high level, will likely strengthen further in 1959.

The recession of 1958 had little effect on the demand for food. Consumer incomes were well maintained, and sales at retail food stores in the first 9 months of this year averaged 6 percent above the same period of 1957. With higher marketing margins, as well as higher prices at the farm, the farmer's share of the consumer's retail food dollar showed little change. In 1959, with continued improvement in the economy, consumer expenditures for food will rise, even though prices to the consumer may average a little lower.

The 1957-58 fiscal year saw a substantial reduction in exports of cotton and wheat. In the current fiscal year, exports of cotton may be reduced further, but exports of grain will show a substantial increase, particularly shipments under Public Law 480.

Supplies of Farm Products

This year, farm output is a record high and surplus stocks are increasing. Supplies will continue to be very large in 1959.

Crop output in 1958 is 10 percent larger than in 1957, and a new record high. Crop yields are up 20 percent in the last 4 years with an 11 percent increase recorded this year. Very favorable weather was partly responsible, but improvements in technology have also contributed to the persistent uptrend in yields.

No one can tell at this point what crop production may be in 1959. The record 1958 output was due partly to very favorable weather. But, even with average growing conditions, crop output could be about as large next year as this year, considering the continuing improvements in technology and the return to use of some 17 million acres withdrawn from wheat, cotton, corn, rice, and tobacco under the acreage reserve this year. Even though the wheat crop may well be smaller, acreage of cotton can be substantially expanded under the Agricultural Act of 1958.

With heavy feed supplies and favorable feed price relationships, livestock output is increasing, particularly for hogs, eggs, and poultry.

CCC investment in inventories and price support operations dropped from 8.4 billion dollars at the end of fiscal 1956 to 7.4 billion at the end of fiscal 1957, and to 7.0 billion at the end of fiscal 1958. The drops in inventories during the past two fiscal years followed the 7 billion dollar increase that occurred in the previous four years. A substantial increase is occurring in the current fiscal year.

Stocks of wheat, which have been moderately reduced in recent years, will rise to a new high this crop year. Stocks of corn and other feed grains, which have risen steadily since 1952, will also reach a new record. Stocks of cotton which were reduced sharply in the last 2 years will show a small further reduction in the current season.

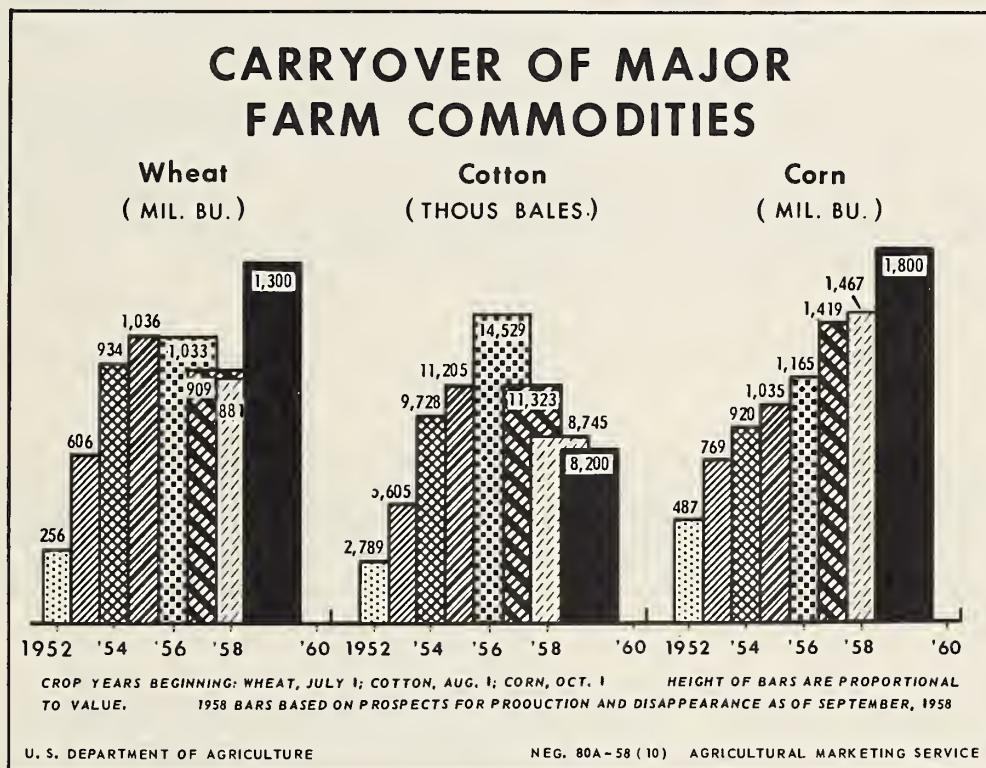


FIGURE 3

Some Uncertainties

Last fall, we did not look for a substantial increase in farm income. As usual, our forecasts were based upon stated assumptions:--among them were average weather and little change in Government payments. Actually, bad weather in the fall of 1957 delayed marketings of cotton and corn until 1958, thus reducing farm income in 1957 and increasing it in 1958. Also exceptionally good weather in 1958 resulted in sharp increases in crop yields and production which have been responsible for over half of the improvement in farm income this year. Furthermore, last fall, funds for the acreage reserve had been reduced but were reinstated early this year. Again this year we are assuming average weather, no major changes in the farm program, and about the same international situation.

For 1959, we think there is little uncertainty with respect to demand. This should be strong. But our forecast of farm income could be moved very substantially up or down if any of our assumptions turn out to be wide of the mark. One special uncertainty for 1959 is that of crop yields. Yields are difficult to anticipate--not only because it is difficult to predict the weather a year ahead, but also because we have not fully assessed the effects of tremendous improvements in technology. Moreover, the so-called "cycles" in livestock production are proving to be marked by irregularities that are not fully understood, and therefore are hard to forecast.

Farm Costs

Prices paid for goods and services used in farm production are expected to be higher in 1959 than in 1958. They were 5 percent higher in September 1958 than a year earlier, and are expected to continue upward. Wage rates paid to hired labor and prices paid for nonfarm goods and services, except fertilizer, are still rising, and probably will average higher in 1959 than in 1958.

Prices of fertilizer are expected to remain about at present levels, and land values, interest, taxes, and insurance costs are expected to continue upward. With normal weather, current production trends and lower support prices for feed grains, prices paid for feed and seed are likely to be lower. Inasmuch as the cattle cycle is still in its expansion phase and with an abundant feed supply, prices paid for breeding stock and stocker and feeder cattle probably will remain near present levels.

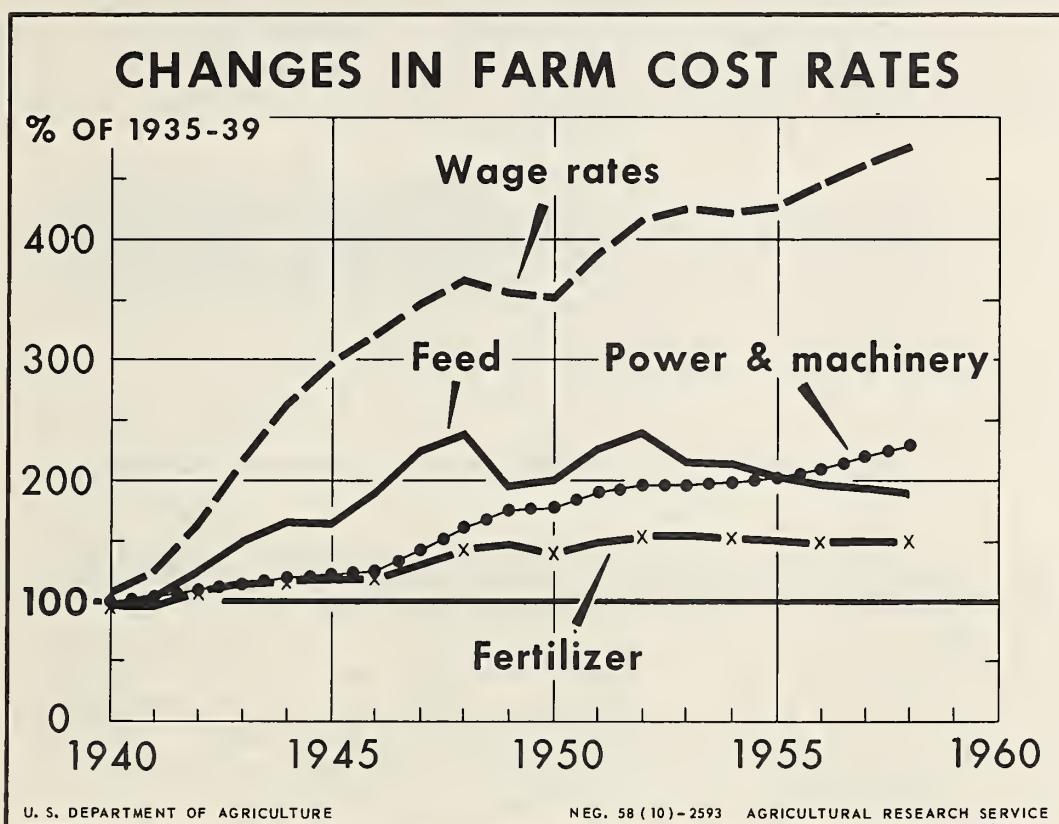


FIGURE 4

Cost rates and prices paid by farmers for major groups of production items this fall compared with a year earlier are as follows:

Feed (October 15)	up 1 percent
Feeder livestock (October 15)	up 23 percent
Motor supplies (September 15)	down 1 percent
Motor vehicles (September 15)	up 4 percent
Farm machinery (September 15)	up 5 percent
Farm supplies (September 15)	up 3 percent
Building and fencing material (September 15)	up 1 percent
Fertilizer (September 15)	down 1 percent
Seed (September 15)	up 3 percent
Wage rates (October 15)	up 5 percent
Farm real estate taxes per acre (October 15)	up 7 percent

Costs per unit of production were slightly lower in 1958 than in 1957. In 1958, production expenditures will be about 6 percent larger than in 1957, but total output will be about 8 percent larger. Costs per unit of production therefore will be lower this year as a result of the larger output, but a similar increase in production in 1959 is unlikely.

Most of the reduction in costs per unit of production occurred on a relatively few types of farms. The much larger wheat crop, particularly on farms in the Southern Great Plains, served to reduce sharply the unit costs on these farms; where crops were poor in years immediately preceding 1958, unit costs had been abnormally high. Costs per unit also were lower on many farms in the Corn Belt because of more favorable growing conditions and greater production. On cattle ranches in the Intermountain Region, favorable weather and above average range conditions for the past 2 years enabled these ranches to continue producing at relatively low unit costs.

The ratio of prices received to cost rates probably will not be so favorable in 1959 as in 1958. Both prices paid by farmers and costs per unit of production are expected to be higher in 1959 than in 1958. In September 1958, the ratio of prices received to prices paid for production goods and services was about the same as a year earlier, but less favorable than in the spring of 1958. Since May of this year, prices received have declined, while cost rates remained at about the same level. With the prospect for higher cost rates next year and some decline in prices received, a renewal of the price-cost squeeze is likely.

Farm Credit and Finances

Farmers will begin 1959 in an improved credit and financial position. For the agricultural industry as a whole, the value of total assets will reach about 200 billion dollars by January 1, 1959, up 7 percent from a year earlier. Equities of farmers and other owners of agricultural property will be approximately 177 billion, or 89 percent of total assets. This is the result of the higher income that farmers received in 1958, the rise in land values, and the more valuable inventories of crops and livestock that farmers will have at the beginning of 1959.

INCREASE IN FARM ASSETS, DEBTS AND EQUITIES, 1958

ASSETS



DEBTS, EQUITIES



■ Real estate

■ Other physical

■ Financial

■ Debts

■ Equities

U. S. DEPARTMENT OF AGRICULTURE

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FIGURE 5

Generally excellent crop and pasture conditions and favorable prices, especially for livestock, have resulted in good pay-offs of loans--both 1958 loans and debts accumulated from earlier years. Catching up on debts was particularly important in the former drought areas of the Great Plains and Mountain Regions. Debts in parts of the Northeast and Southeast which suffered from drought or excessive rain in 1957 will also be in a much more current condition at the beginning of next year. Delinquencies are generally low and farm foreclosures are negligible.

Farmers stepped up their use of production credit in 1958, and will probably use even more in 1959. Demand for farm-mortgage credit, which has been relatively low during the last two years, increased somewhat in mid-1958, and may continue to increase in 1959. Following some decline in early 1958, interest rates have recently strengthened and may increase slightly more in 1959.

Farmers in general will have slightly larger financial reserves of cash, bank deposits, and U. S. savings bonds at the start of 1959. Many who are not increasing their savings have been spending more for both family and farm outlays. Replacement of farm machinery, improvements to buildings, and purchases for the home have been at higher levels this fall and will probably continue so into early 1959 at least. Reinvestment of 1958 receipts in feeder and stocker cattle has been substantial, especially in the Corn Belt, Great Plains, and Mountain Regions. Federal income tax payments, which are payable in the early months of 1959, are expected to be about a fourth higher than in 1958. The year 1959 will bring another rise in farm property tax payments, about 6 percent more than in 1958.

Areas where financial conditions deteriorated appear to be fewer in 1958 than usual. Drought occurred in only limited sections of the Lake States, Corn Belt, Northern Plains, and Mountain Regions.

Land Prices

Most of the forces behind the rise in prices of farm real estate since the recent upturn in 1954 will be present in 1959. Carryover effects of higher farm income in 1958 and continued recovery of the general economy are likely to give additional impetus to the rise through the winter and early spring of 1959. Even though the trend may lose some of its momentum in the last half of the year because of lower farm income, the total increase in the national index of land prices for the year could still be as large as the 6 percent rise in 1958.

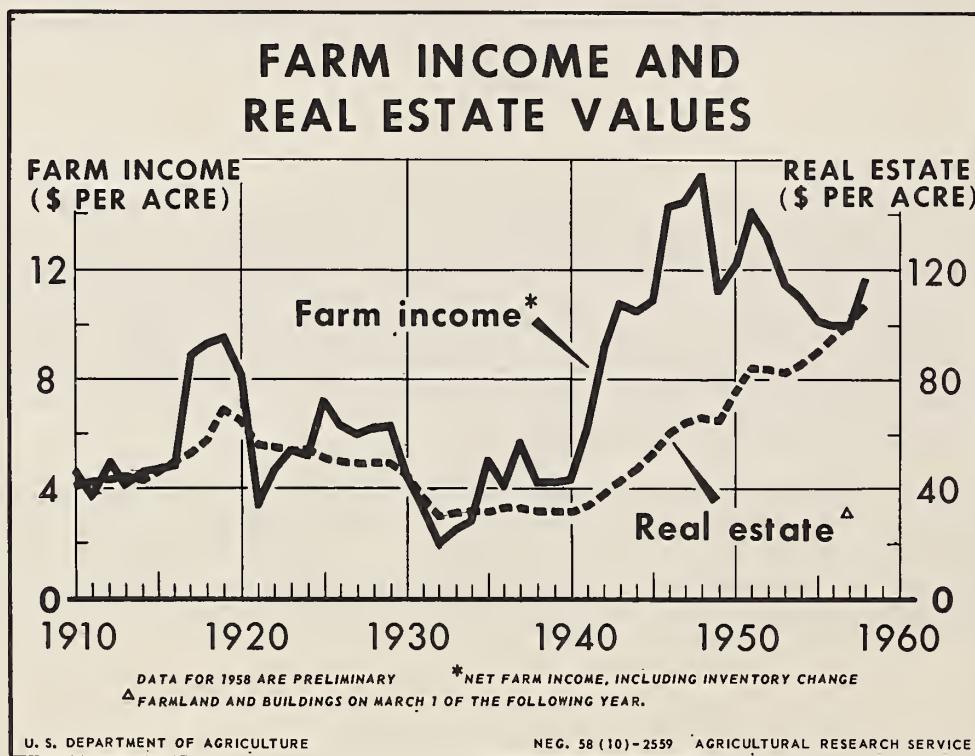


FIGURE 6

With most major types of farms expected to have increased net income in 1958, more than the usual number of farmers will be able to make new capital investments. A significant number of farmers have shown a strong desire to enlarge their operating units when circumstances permitted. Nationally, about 2 percent of the farms were larger in 1958 than in 1957. About half of these became larger by renting land, and half by buying land. Such purchases for farm enlargement accounted for about two-fifths of all land transfers last year, the proportion about double that of 1950. There is no reason to expect a slackening in the demand for land for farm enlargement purposes on the part of present farmers.

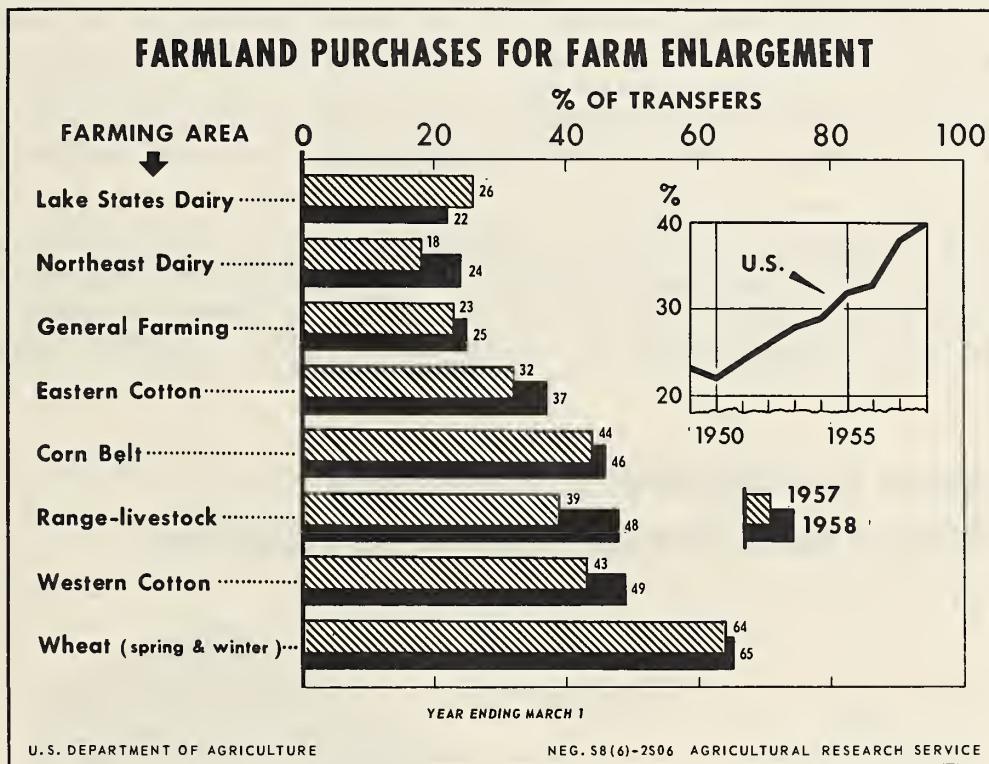


FIGURE 7

High levels of nonfarm income, industrial and urban growth, and a rising general price level have also contributed to the uptrend in prices of farm real estate in recent years.

The supply side of the market can be expected to be an important determinant of market trends in 1959, as it has in the last several years. The bulk of the land offered for sale has resulted from estate settlements, retirements, and the movement of farmers out of agriculture. Transfers resulting from financial distress have been rare and should be even less frequent in 1959. Until a significant change occurs in earnings from land and in the expectations for capital appreciation, the market supply will continue to be limited.

Recent changes in agricultural programs will have varying effects on the land market, depending on the area and the crop affected. Higher rates of payment under the 1959 Conservation Reserve Program may have encouraged retention of ownership of some farms that otherwise would have been sold. An assured annual income under this program, together with Social Security income, makes it possible for eligible farmers to retire and continue to live on the farm. Those not eligible for Social Security can continue to receive a return from their land while working at nonfarm jobs. Both situations tend to reduce the number of farms that would otherwise have been offered for sale.

Exports

Stronger competition from foreign producers, rather than major developments in the world economic and political situation, is expected to bring about a small decline this year in total U. S. agricultural exports. Production in foreign countries is at a high level and it is continuing to expand.

U. S. agricultural exports in 1958-59 are expected to total about \$3.8 billion. While this is considerably under the \$4.7 billion total of 2 years ago and somewhat under the \$4 billion of last year, nevertheless it would place 1958-59 among the big 6 export years in U. S. agricultural history.

About Two-Thirds U. S. Agricultural Exports Move Outside Government Programs

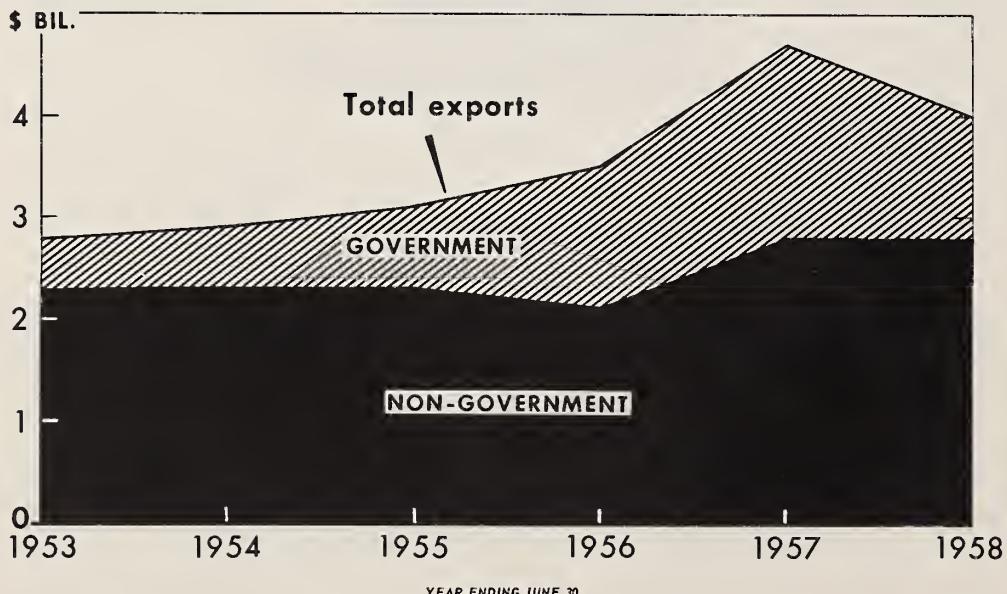


FIGURE 8

Smaller exports of cotton will account for the bulk of the decline in exports in 1958-59 as compared with 1957-58. Exports of animal products (primarily dairy products), tobacco, and also fruits may be down. Some increase is expected in exports of wheat, vegetable oils and oilseeds, and possibly feed grains--but not enough gains to make up for the drop in the others named.

To be successful in export selling, the United States not only needs to have products that are competitive in quality and price, but also needs foreign customers who have money to buy. By June 30 of this year, the gold and dollar assets of foreign countries had reached an all-time high of \$31.5 billion, a gain of \$1.7 billion over last year. Most of these increased gold and dollar assets accrued to the industrialized countries of Western Europe, Canada, and Japan.

Most of the rest of the world is experiencing balance of payments difficulties and declining gold and dollar reserves.

Last year, U. S. agricultural exports outside of special Government programs totaled \$2.8 billion, which was 70 percent of the export total. The expected \$3.8 billion total for 1958-59 would break down into \$1.3 billion exported under Government programs, and \$2.5 billion exported through commercial sales outside of Government programs. At this rate, 66 percent of U. S. agricultural exports would be outside of special Government programs.

Cotton & Grains Still Largest Exports But Oils & Fruits Are Increasing

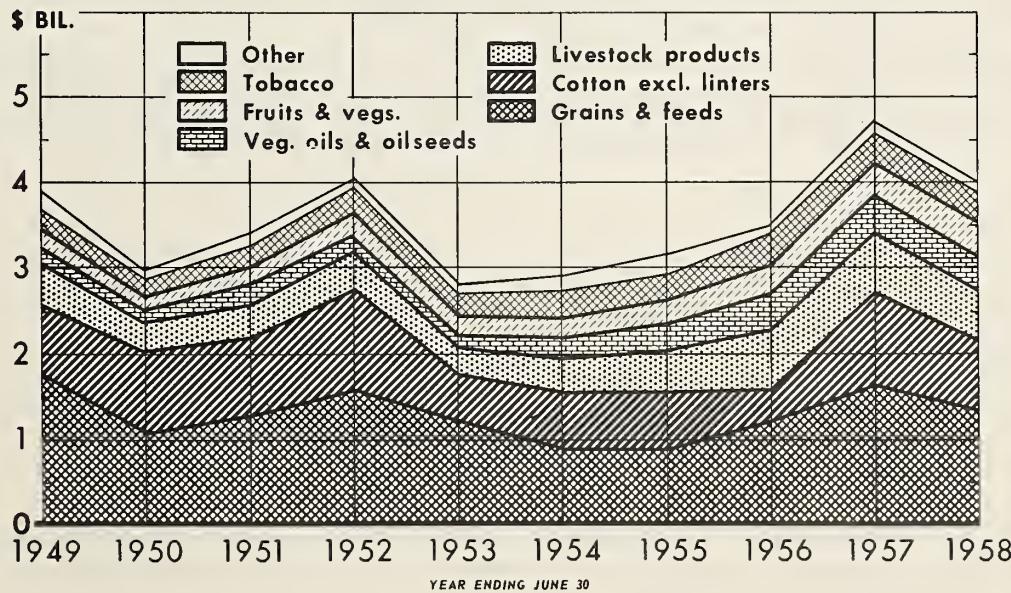


FIGURE 9

Grains and Feeds

Exports of wheat in fiscal year 1959 are estimated at 430 million bushels. This would be nearly 30 million bushels larger than last year. Western Europe--especially France--may import additional wheat to make up for the reported lower quality and quantity of its own crop.

There has been a heavy export movement of feed grains in the first quarter of this year, and if the rate were maintained it would mean an even larger total than last year's record shipments. However, much depends on the yields and quality of the European wheat crop which is an important key to our feed grain export possibilities.

The estimate of rice exports for 1958-59 is about 19 million bags, milled basis, an increase of more than 7 million bags above last year.

Cotton

Exports of U. S. cotton for the year ending July 31, 1959 are expected to total about 4 million running bales.

Weakened foreign demand and increased foreign supply of cotton are the major factors that are expected to bring about the decrease.

Present indications are that consumption of cotton in foreign Free World may decline in 1958-59 to about 20.0 million bales, almost 1.0 million below the high level of 1956-57.

Animal Products

Total exports of animal products are expected to be down, due mainly to an expected decrease in exports of dairy products.

Cheese exports will be down sharply, with cheese no longer being eligible for programming under Section 302 of Title III, Public Law 480. This results from the smaller offerings to CCC under the price support program.

Tobacco

Exports of unmanufactured tobacco for fiscal year 1959 are expected to total about 445 million pounds, export weight. This would represent a decline of 6 percent from last year.

Among adverse factors, supplies of competitive tobaccos are larger and are available for export at prices lower than for similar U. S. tobaccos.

Oilseeds and Oils

A sizeable increase is expected this year in exports of edible vegetable oils. Little change is expected in exports of soybeans. A decline is expected in exports of flaxseed.

Fruits

Exports of U. S. fresh and processed fruits are expected to be less this year than in 1957-58 because of reduced supplies of many of the major export items. Both the U. S. canned fruit and dried fruit packs are lower than last year.

Family Living

Agriculture and the food industries are expected to supply U. S. consumers with an abundant and varied food supply again next year. Per capita consumption of meat is expected to be a little higher in 1959 than in 1958, with the increase chiefly in pork. More broilers are also in prospect for next year. With more normal weather conditions, supplies of vegetables and fruits should also be somewhat higher. Lower prices for meat, vegetables, and fruits may reduce the retail food price index slightly below the 1958 level.

The nutritional quality of per capita food consumption in 1959 will be almost the same as that of 1958. The expected increase in the consumption of citrus fruit and of vegetables may provide slightly more Vitamin C in the average consumer's diet. The average amount of this vitamin has been trending downward since the peak reached at the end of the war and dipped perceptibly in 1958 because of the unfavorable weather conditions early in the year. The expected increase in pork supplies may result in slightly more thiamine, one of the B Vitamins.

New forms and types of foods will continue to appear on grocery shelves and on the family table. Research--much of it in the USDA--has paved the way for several promising new items. One example of such an item is potato flakes for mashed potatoes. Other possibilities include dehydro-frozen fruits and vegetables and fruit juice powders. On the other hand, there appears to be a goodly share of interest in creative cooking--in dishes made all the way from the old-fashioned ingredients or using some of the newer convenience foods. Cooking as a hobby, especially on outdoor grills, will continue to occupy some of the leisure time of the urban and suburban American male. He may also share more of the kitchen duties than formerly because of the away-from-home employment of his wife.

Continued increases in the employment of many married women appear to be likely. The latest Census figures (1957) indicate that the proportion of married women (husband present) having paid employment is almost as high for rural farm families (26%) as for urban (31%). A recent forecast of the Census Bureau indicates that by 1965 we can expect to have about a fifth more women employed than we have today.

Many questions can be raised about the effects of the employment of women on family living. The money earned is not clear gain. A sample group of working wives in four small Georgia cities indicated that expenses directly or indirectly related to their jobs took about 40 percent of their earnings.

For the country as a whole, there is evidence that the recent slight decline in outstanding consumer installment credit has been reversed. This may indicate that more consumers are now ready to make purchases of autos and household durable goods than during 1958 or 1957. With reduced farm income forecast, however, it is not likely that farm families will participate in this upturn to the same degree as nonfarm families.

Changes in family practices in the replacement of consumer durables are reflected in differences in the estimates of the length of time families keep such articles based on data collected in different years. Between 1956 and 1957 (the latter, a year marked by the falling off of sales and the beginning of the business recession), these changes were sufficiently great among urban families to increase by a year the estimated life expectancy of non-automatic washing machines. On the other hand, rural families, who as a class enjoyed as good incomes in 1957 as in 1956, made no change in their replacement practices on this item.

Prices of goods and services purchased by both farm and city families in 1959 may hold at approximately present levels. The expected slight decline in food prices should offset the possible continued rise in some of the services such as medical care.

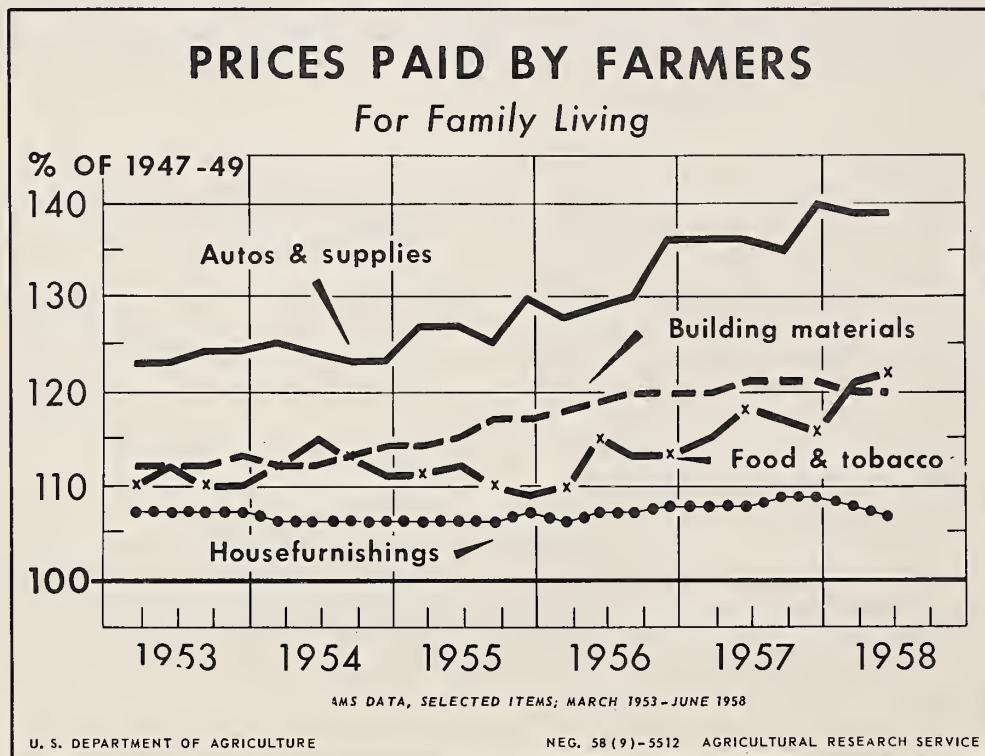


FIGURE 10

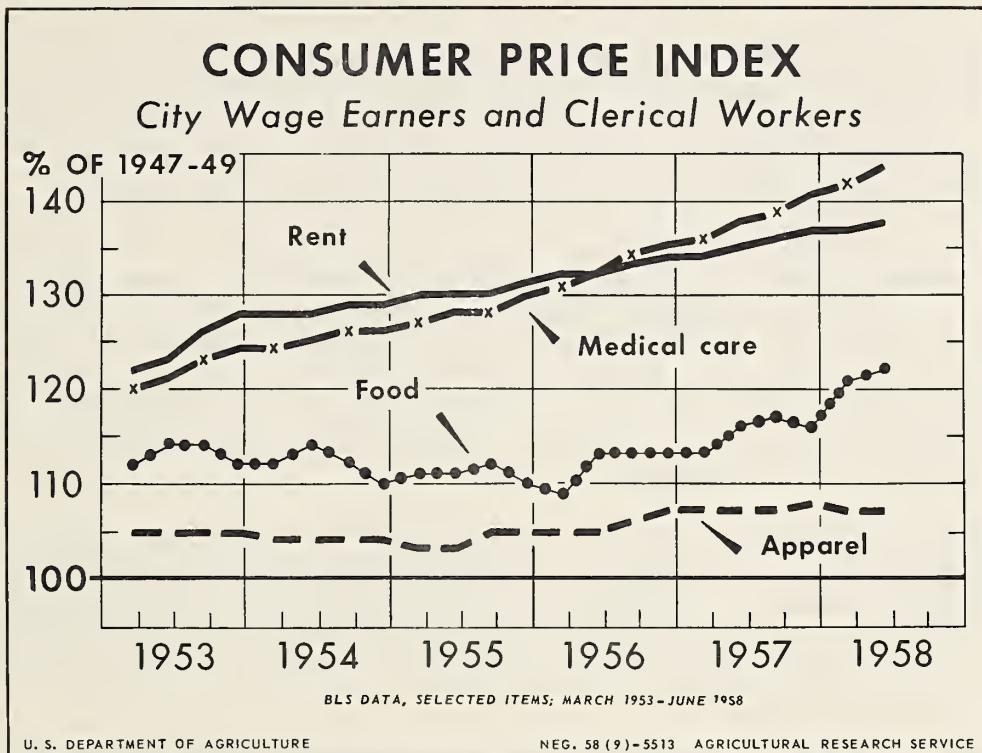


FIGURE 11

Though prices may hold relatively steady, many families, farm and nonfarm, will face the need for increased expenditures as the war and postwar babies grow up. These families are now in or entering upon the most expensive phase of their life cycle. If their young people go to college--and a larger than ever number will be ready for college in the next school year 1959-60--there will be heavy demands on the family finances. Even if college is not in the family plans, they can still expect greater expenditures for food, clothing, dwelling upkeep, transportation, and personal care than when these children were younger.

Commodity Highlights

The highlights of the commodity outlook for 1959 can perhaps best be summarized by considering two groups of farm products: (1) feed and livestock, and (2) storable crops.

Feed and Livestock

The enormous increase in the supplies of feed grains over the past few years is one of the biggest factors affecting the immediate and long-term outlook. Total feed concentrate supplies are now about 10 percent larger than the very ample stocks of a year ago. Supplies of feed per animal unit are 60 percent over the average of the prewar years 1937 to 1941.

One result is the continued low prices of feed grains. Feed grains will doubtless continue low in 1958-59, probably a little lower than prices of the past year. Low prices and ample supplies of feed grains are certain to increase the output of livestock and livestock products sooner or later. If this increase is orderly and fairly moderate, it will be in line with consumer demands and with the best interests of agriculture in the long run. But there is a real danger that output of some of these products may expand more quickly than warranted by market demand.

The biggest danger for 1959 is in hogs. Marketing of hogs next year will be considerably larger than in 1958, and prices will be substantially lower next fall than now. Supplies of poultry and eggs are also likely to be higher in the first half of 1959, at least, than in the same period of this year. As a result, prices of these products probably will be somewhat lower than those of this year.

On the other hand, very little change is expected in the marketings of cattle, lambs, and milk. Prices for these products in 1959 should be close to those in 1958. But if the current build-up in cattle numbers proceeds too rapidly, producers will face considerable price trouble later.

Storable Crops

Large and expensive Government disposal programs have made somewhat of a dent in agricultural surpluses since 1956. CCC holdings dropped 1.4 billion dollars in the past two fiscal years. This trend is being reversed in the current fiscal year as a result of record production. This year's build-up of inventories may wipe out the reductions made in the past 2 years.

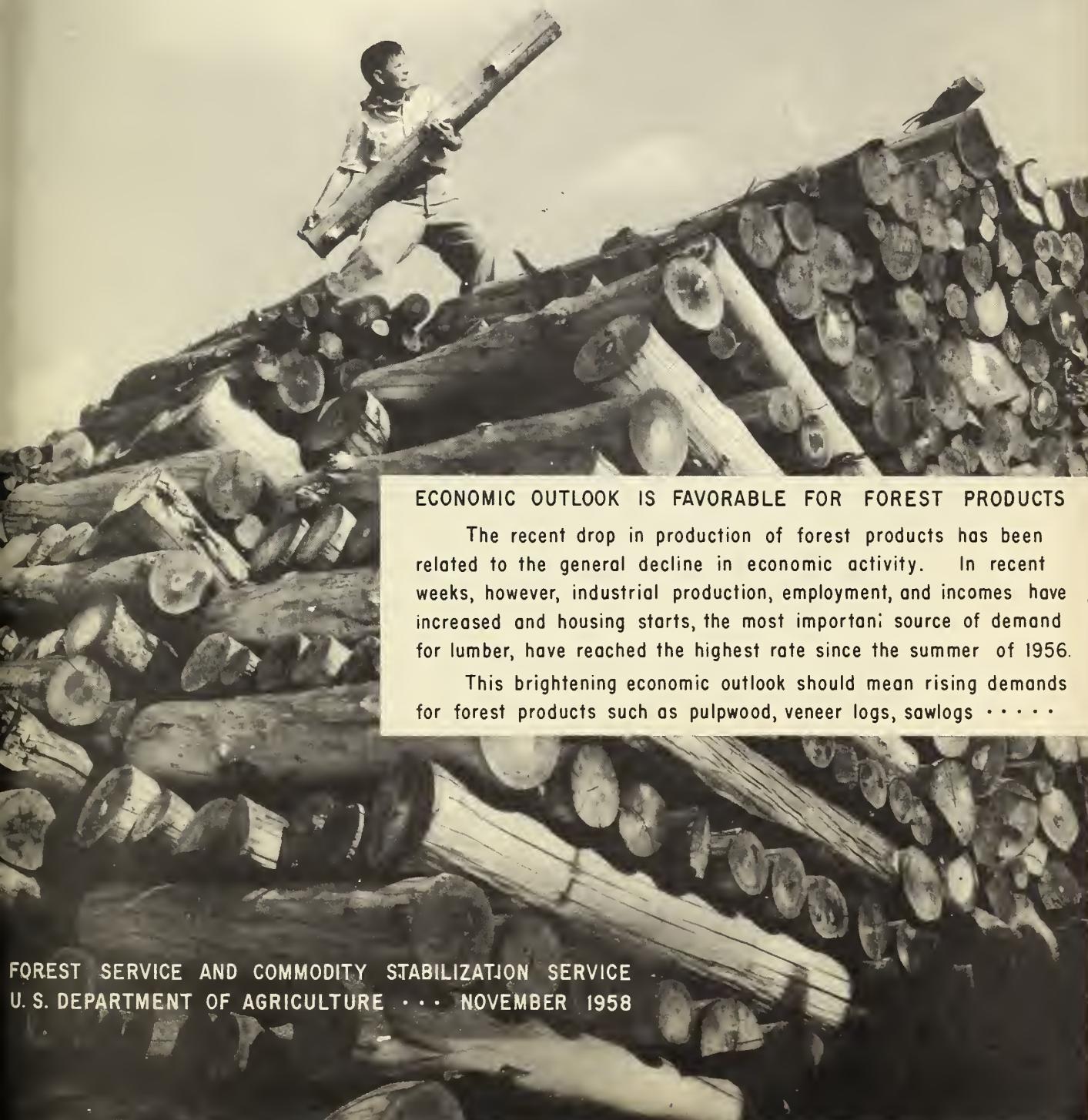
Wheat stocks were reduced by 155 million bushels in the 3 years ending June 30, 1958. They are likely to increase by about 420 million during the current crop year. Corn stocks have risen since 1952, and will rise further this year. Stocks of cotton, which have been reduced from 14 1/2 million bales to less than 9 million in 2 years, may be reduced a little further during the present year. Stocks of rice are also sharply down, with a further decline in view this year. On the other hand, supplies of canned vegetables are larger than a year ago. Increased oilseed production, particularly of soybeans, and larger stocks are resulting in a sharp rise in fats and oils production in 1958-59. Prices for oilseeds are likely to average near support.

The supplies of most kinds of tobacco are lower than a year ago, and consumption continues to increase.





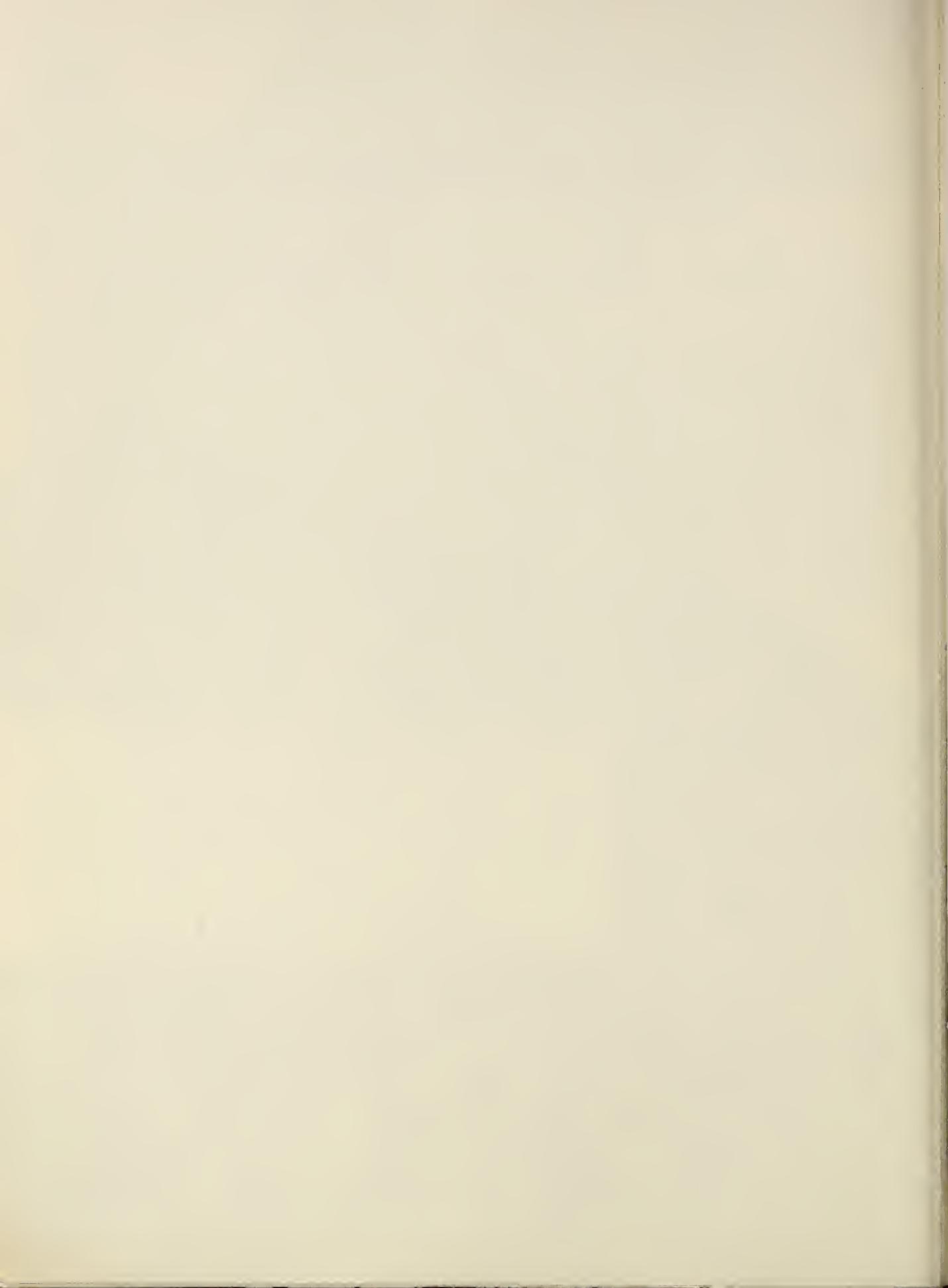
The Demand and Price Situation for Forest Products



ECONOMIC OUTLOOK IS FAVORABLE FOR FOREST PRODUCTS

The recent drop in production of forest products has been related to the general decline in economic activity. In recent weeks, however, industrial production, employment, and incomes have increased and housing starts, the most important source of demand for lumber, have reached the highest rate since the summer of 1956.

This brightening economic outlook should mean rising demands for forest products such as pulpwood, veneer logs, sawlogs



FOREWORD

This report was prepared primarily as background information for the Outlook Conference held by the U. S. Department of Agriculture in November 1958. The analysis of timber products was prepared by Dwight Hair in the Division of Forest Economics Research, Forest Service, and the analysis of naval stores by Herbert B. Wagner in the Tobacco Division, Commodity Stabilization Service.

Much of the information on prices was taken from price reports published by individual States. These reports along with other reports containing information on prices or production of forest products are listed under "Literature Cited" page 18.

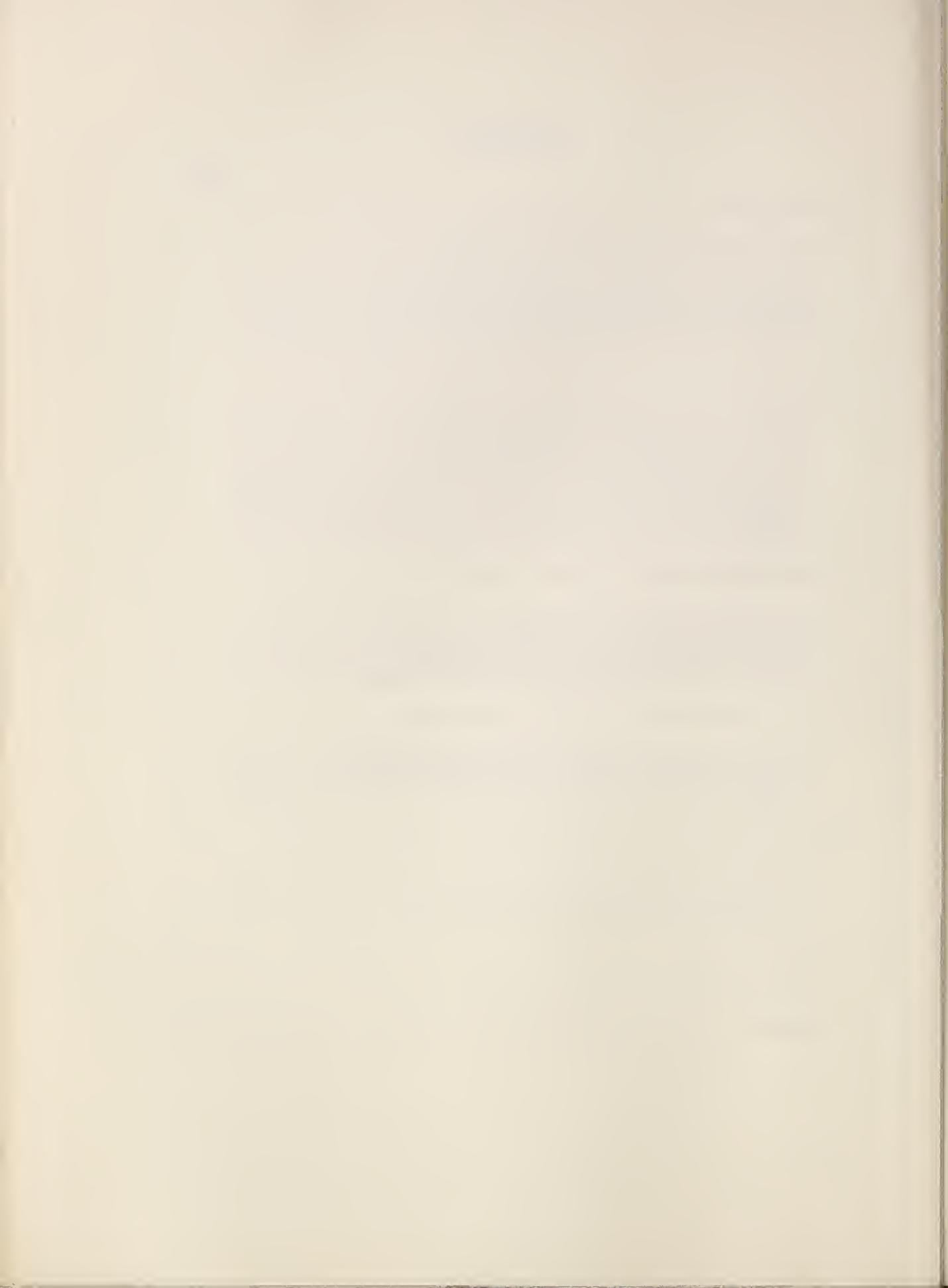
The brief analysis of the outlook for timber products in 1975 and 2000 is based on assumptions concerning population trends, gross national product, and other related factors contained in a separate "Future Demand for Timber" from the comprehensive report "Timber Resources for America's Future" published by the Forest Service in 1958 (19, 21).¹ Copies of this separate are available upon request from the U. S. Department of Agriculture, Forest Service, Washington 25, D. C.

¹Numbers in parentheses refer to Literature Cited, p. 18.



CONTENTS

	<i>Page</i>
Introduction.....	v
The demand and price outlook for stumpage	1
Demand for industrial roundwood declines in 1957 and 1958	1
Stumpage prices decline more than production.....	1
Declines in demand and prices reflect drop in economic activity ...	2
Economic outlook is favorable for industrial roundwood products .	2
The demand and price outlook for saw logs and lumber	3
Production shows some decline in 1958	3
More than half the sawlog volume produced now cut in the West...	3
Saw-log price quotations show little change	5
Decline in demand for saw logs reflects drop in economic ac- tivity and substitution.....	5
Some increase in demand expected in the period immediately ahead	6
Looking further ahead substantial increases expected	7
The demand and price outlook for pulpwood.....	7
Pulpwood production shows some decline in 1957 and 1958.....	7
Softwoods preferred for pulpwood.....	8
Pulpwood production concentrated in the South.....	8
Pulpwood prices show little change since 1956.....	8
Decline in demand for pulpwood believed temporary	9
The demand and price outlook for veneer logs	9
Veneer log production shows little change since 1955.....	9
Veneer log price quotations also show little change	10
Demand likely to increase for both softwood and hardwood veneer logs	11
The demand and price outlook for other roundwood products	11
Production of other industrial roundwood products shows vari- able trends--prices vary widely.....	11
Consumption of Christmas trees rising slowly.....	12
Outlook summary	15
Literature cited	18
Appendix.....	21



INTRODUCTION

The purpose of this report is to present information on current trends in the demand and price situation for forest products. Major emphasis is placed on national trends in demand and prices and the general economic indicators such as construction which determine what future demand and prices are likely to be.

Forest products comprise an important source of income for forest landowners as well as forest industries and labor in the United States. In 1954, for example, the stumpage value of the timber cut amounted to an estimated 1 billion dollars. A substantial part of this sum was distributed to the 4.5 million small forest ownerships which collectively contain more than half of all the commercial forest land in the country.

The value of saw logs, pulpwood, and other round timber products, as well as Christmas trees, pine gum, and maple sap at local points of delivery, amounted to an estimated 2.5 billion dollars (table 1). This market value equalled about 13 percent of the local market value of all farm crops harvested, was about equal to the value of cotton harvested, and was about 30 percent greater than the value of the wheat harvested (fig. 1). Corn was the only farm crop which substantially exceeded forest products in terms of local market value.

The relative importance of these forest products compared with farm crops harvested varied widely among States as shown in table 1. In New Hampshire and Oregon

Forest products comprise an important agricultural crop

Local market value is about $\frac{1}{7}$ the value of farm crops harvested

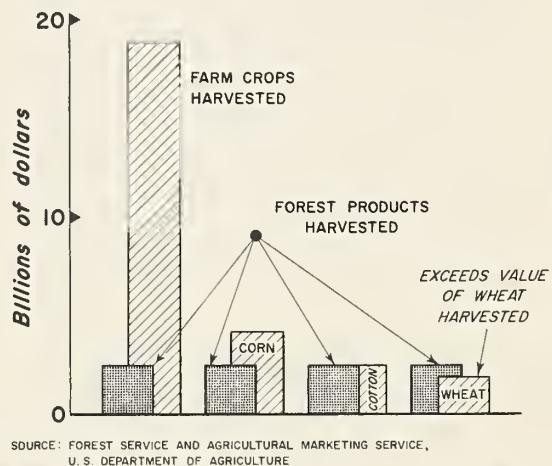
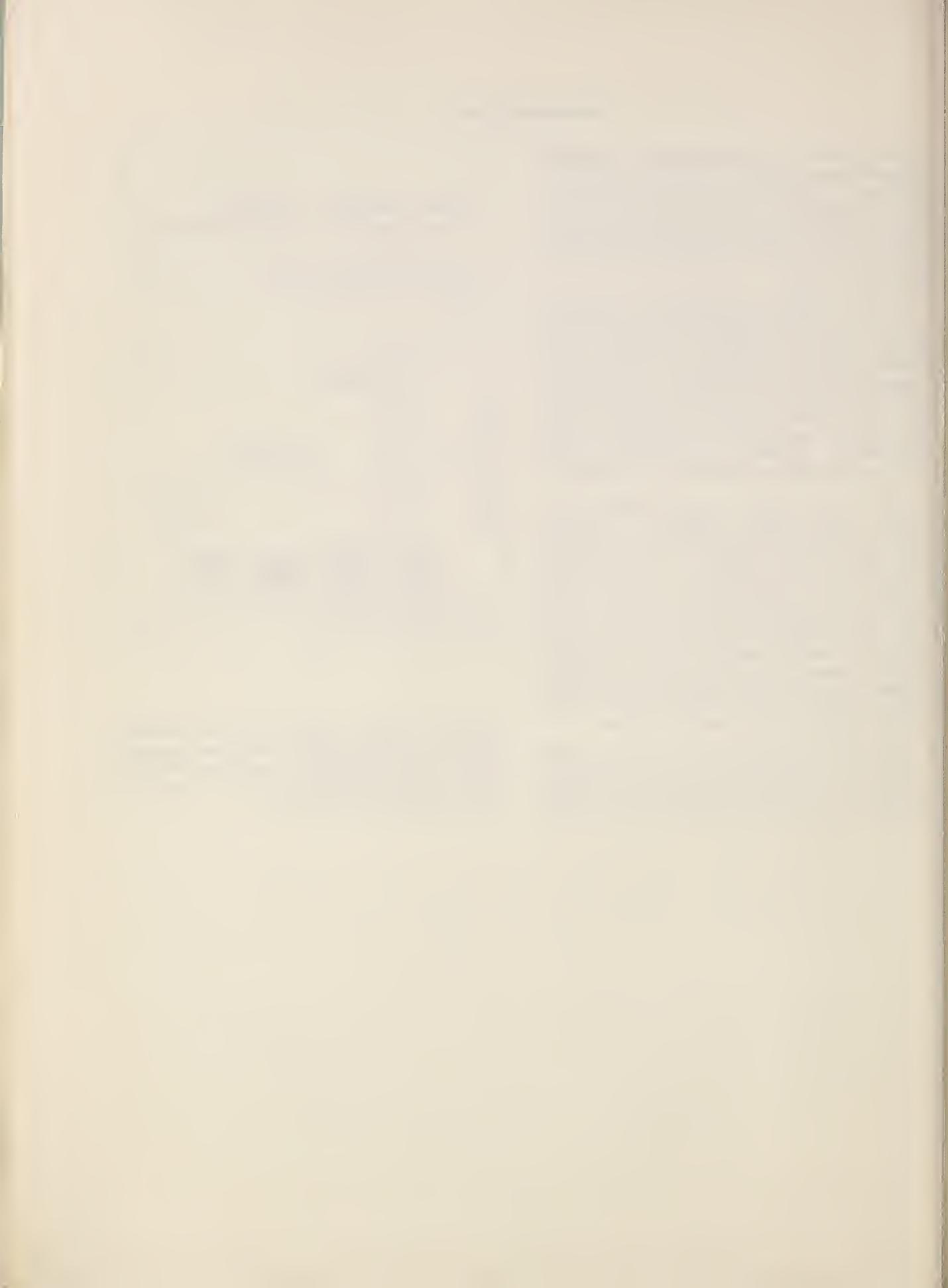


Figure 1

the local market value of forest products harvested was greater than the value of farm crops harvested. In many other States it was greater than the value of the most important crop harvested.



THE DEMAND AND PRICE OUTLOOK FOR STUMPPAGE

Demand for industrial roundwood declines in 1957 and 1958

The volume of industrial roundwood (all round products except fuelwood) produced in the United States in 1958 is estimated at 8.6 billion cubic feet. This is about 2 percent less than estimated production in 1957 and 10 percent below production in 1956 (table 2, fig. 2). Saw logs account for 59 percent of the estimated output in 1958, pulpwood 26 percent, veneer logs 7 percent, and miscellaneous products such as cooperage logs and bolts, mine timbers, and poles and piling the remaining 8 percent.

compared to the 10 percent decrease in production (table 2). This reflects the use of stocks of lumber, pulpwood, paper and board, etc., and imports from other countries. Imports although showing some decline were fairly well maintained for most products in 1957 and 1958.

Imports have supplied an increasing proportion of the industrial roundwood used in the United States. Since 1915, when this country first became a net wood-importing nation, net imports of roundwood² have increased from 130 million cubic feet to the present level of about 1.2 billion cubic feet. Currently imports, largely from Canada, account for about 12 percent of all the industrial roundwood consumed.

Stumpage prices decline more than production

National forest stumpage prices dropped in 1957 and the first two quarters of 1958 and currently average considerably below prices received during 1956 (table 3, fig. 3). The price received from sales of Douglas-fir stumpage, for example, dropped from an average of \$37.70 per thousand board-feet in 1956 to \$20.60 per thousand in the second quarter of 1958--a decline of about 45 percent. The prices received from sales of sugar pine and ponderosa pine showed a somewhat similar decline. On the other hand, the average stumpage prices received from sales of southern pine fell only from \$37.40 per thousand board-feet during 1956 to \$30.65 during the second quarter of 1958.

While these prices are based on national-forest timber sales, fragmentary data in a number of regions suggests that prices of comparable private stumpage have followed a similar trend. Prices of public timber, however, do not necessarily indicate prices for private timber.

Currently nine States publish at varying intervals reports containing information on private stumpage prices (1, 3, 4, 6, 8, 11, 12, 32, 33). The degree of detail in these reports varies from State to State. In general the reported prices are based on timber-buyers quotations, and are usually presented as a range of prices per thousand

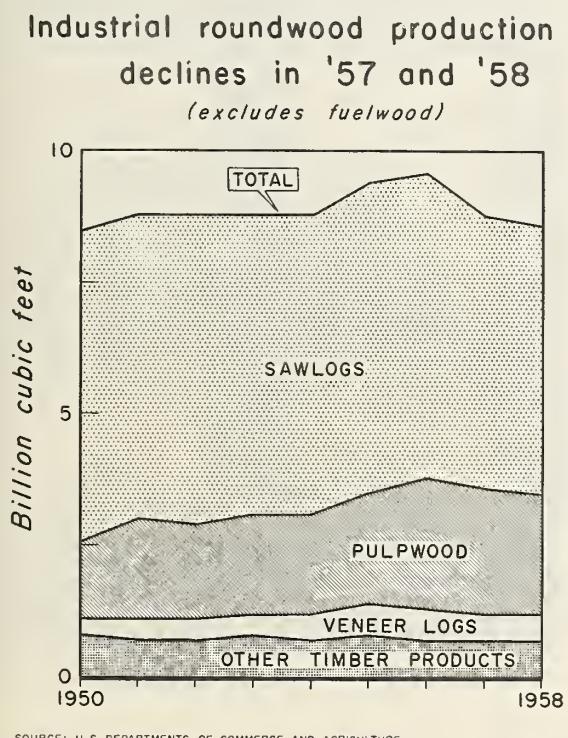


Figure 2

The decline in production of industrial roundwood in 1957 and 1958 reflects a sharp drop in the demand for saw logs, a modest drop in the demand for pulpwood and miscellaneous products, and a leveling off in the demand for veneer logs and bolts. Most of the decline in production occurred in 1957.

Consumption of industrial roundwood in the period 1956-58 declined only 8 percent

² Including the roundwood equivalent of lumber, veneer, plywood, woodpulp, paper and board.

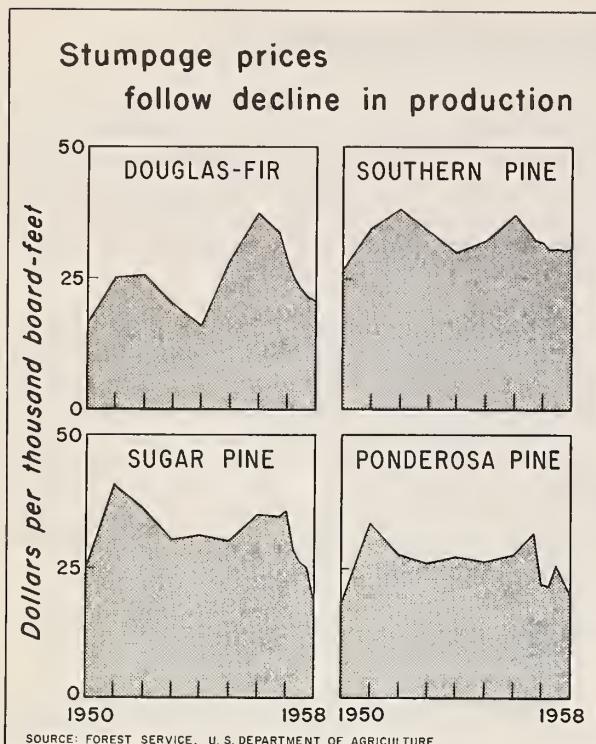


Figure 3

board-feet and/or average prices, without specifications as to grade, log rule, other value factors or sampling accuracy. Illustrative stumpage prices taken from some of the State reports published in 1958 are shown in the tabulation below:

Species:	State and source	Price of stumpage per thousand bd.-ft.
Southern pine:		
Saw-log timber	Louisiana (6)	\$25.00 - 35.00
Pulpwood timber		8.20
Gums	Louisiana (6)	7.00 - 12.00
White oak veneer stumpage	Illinois (4)	12.00 - 80.00
Hard maple	Wisconsin (33)	20.00 - 40.00
Yellow birch	Wisconsin (33)	25.00 - 55.00

Stumpage prices received for individual timber sales, whether public or private, vary with species, quality, logging and processing costs, marketing practices, and market conditions.

Declines in demand and prices reflect drop in economic activity

The declines in the production of industrial roundwood and in stumpage prices were rather directly related to declines in economic activity. From September 1957 to March 1958, gross national product dropped from an annual rate of \$445.6 billion dollars to \$425.8 billion dollars (26) (fig. 4). From August 1957 through April 1958, industrial production contracted by about 13 percent and nonagricultural employment declined about 5 percent (2, 28).

Economic recovery seems in prospect

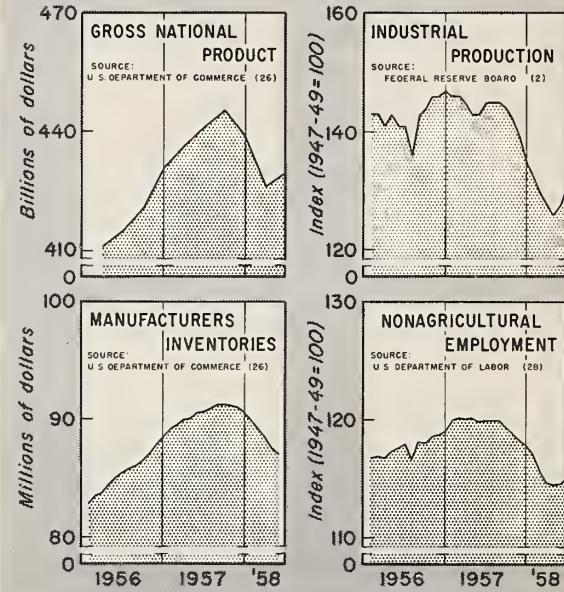


Figure 4

During this same period, manufacturing and trade inventories also dropped (26). The result of these and other similar changes was to reduce the demand for lumber, veneer and plywood, woodpulp, paper and board, and other wood products.

Economic outlook is favorable for industrial roundwood products

In recent weeks, the decline in economic activity has been reversed and industrial production, employment, and gross national

product have increased slightly (fig. 4). Additional factors favorable to recovery include an easier credit situation, lower interest rates, and a fairly stable trend in wholesale and retail prices. And finally, housing starts, the most important source of demand for lumber, reached a seasonally adjusted annual rate of about 1.2 million units in July--the highest rate since the summer of 1956 (27). This brightening economic outlook should mean a rising demand for industrial roundwood products.

The Forest Service has recently taken a long look ahead at the prospects for timber markets in view of expected trends in population growth, increases in gross national product, and other related factors (19). Projections indicate that by 1975 potential demands for industrial roundwood may be 30 to 50 percent above consumption in 1952.

The long-range demand outlook points to future timber supply problems and increased stumpage values, particularly for preferred softwoods and high-quality timber. From the standpoint of forest landowners, this means better market opportunities, higher prices, and more favorable opportunities to practice forestry. From the standpoint of the public and forest industries this appraisal emphasizes the need for a major strengthening of forestry efforts in the United States, particularly on small forest ownerships in the hands of farmers and other miscellaneous private owners.

THE DEMAND AND PRICE OUTLOOK FOR SAW LOGS AND LUMBER

Production shows some decline in 1958

The volume of saw logs and lumber produced in the United States in 1958 is estimated at 33.0 billion board-feet³--about 2 percent less than in 1957, and 12 percent less than in 1956 (table 4, fig. 5).

Domestic saw log production is the source of most of the lumber consumed in the United States. In the period 1953 through 1957, estimated domestic lumber production averaged 36.4 billion board-feet com-

³Estimates for 1957 and 1958 are based on data published by the National Lumber Manufacturers Association (9, 10).

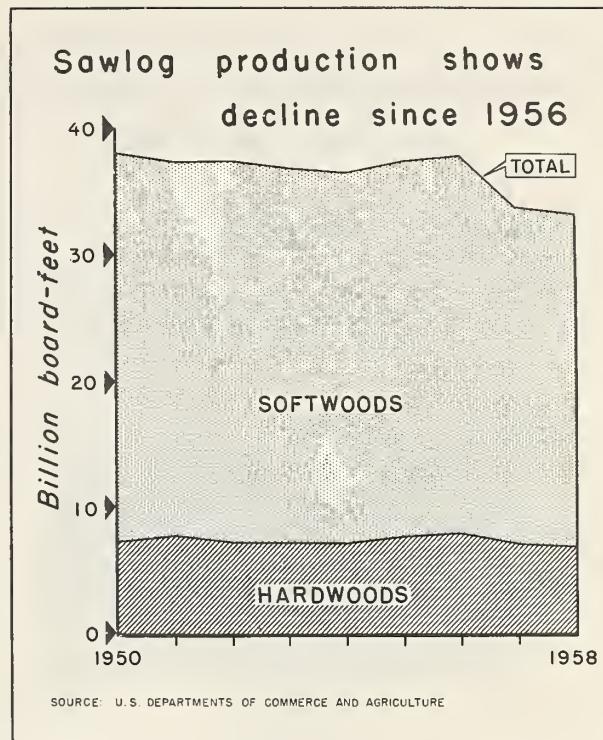


Figure 5

pared with average imports of 3.2 billion board-feet and average exports of 0.7 billion board-feet. Softwood lumber from Canada has made up most of the lumber imports. Hardwood lumber from tropical countries, while highly important for some special uses, accounted for only a small part of lumber imports.

More than half the saw log volume produced now cut in the West

Domestic saw log and lumber production is concentrated in the West⁴ where an estimated 17.8 billion board-feet of lumber was produced in 1958 (table 5, fig. 6). This represents over half of all lumber and two-thirds of the softwood lumber produced in the United States. The three Pacific Coast States--Oregon, Washington, and California--account for about 80 percent of the lumber produced in the West and 45 percent of total production in the country. Oregon is the Nation's leading lumber producing State.

⁴The West includes the 11 western States and South Dakota. The South consists of the 12 most southern States, including Virginia. The North includes the remaining 24 States.

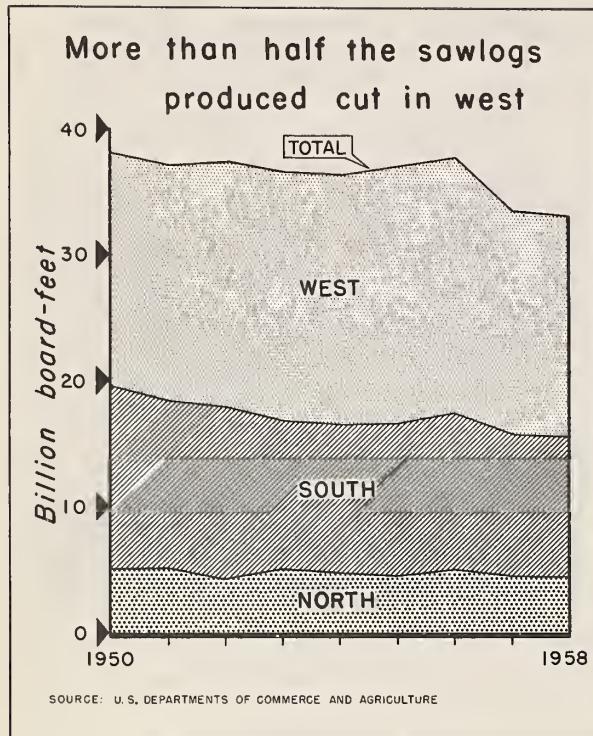


Figure 6

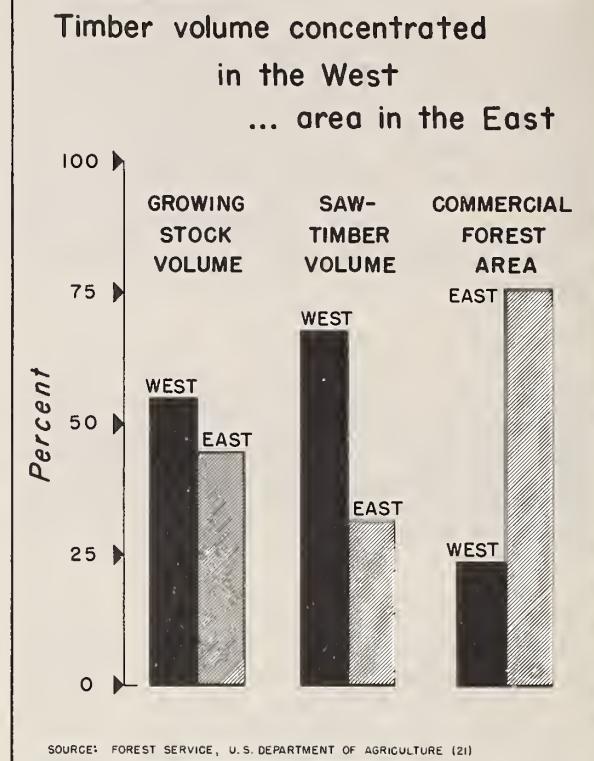


Figure 7

The West is expected to continue to be the most important region in lumber production for some time to come, largely because this region contains about 1,345 billion board-feet of sawtimber or two-thirds of the Nation's present supply (fig. 7). This region has 80 percent of the country's softwood volume, most of which is old-growth sawtimber of relatively high quality. Commercial forest lands in the West, however, make up only 24 percent of the timber-growing acreage in the country.

The South in 1958 produced an estimated 10.8 billion board-feet of lumber or about 33 percent of total production in the country. There has been no marked trend in lumber production in the South since 1940, although production in 1957 and 1958 was somewhat below the average for this period and softwood lumber cut has declined slightly in relative importance while hardwood lumber production has increased. In 1954, six southern States--North Carolina, Georgia, Alabama, Virginia, Arkansas, and Mississippi--each produced more than a billion board-feet of lumber.

The South contains about 40 percent of the Nation's commercial forest land, although it has only 22 percent of the Nation's present growing stock and 17 percent of the sawtimber. Growth rates are high, logging conditions are relatively easy, year-round woods employment is possible, and labor supplies are relatively abundant. Market location is also highly favorable with relatively short distances to the great industrial centers in the North and Midwest.

Lumber production in the North in 1958 is estimated at 4.4 billion board-feet, or slightly below the average for the past 15 years. Pennsylvania, Maine, New York, Michigan, and Wisconsin are the leading lumber producing States in the North. The North contains 36 percent of the Nation's commercial forest land, but only 22 percent of the growing stock and 13 percent of the sawtimber, mainly hardwoods. Timber growth in 1952 exceeded cut, but average timber quality is low and growth is far below potential yields.

Softwoods chiefly Douglas-fir, southern pine, Ponderosa pine, western true firs

and hemlock are expected to account for about 80 percent of all saw logs and lumber produced in 1958. Softwoods comprise about 90 percent of the lumber used in construction, the major end use of lumber, and about 70 percent of the lumber used in shipping. Hardwoods, however, are preferred in manufacturing fabricated products where they account for about 70 percent of all lumber consumed.

Oak species comprise about half of the hardwood lumber produced and gum, maple, yellow poplar, and cottonwood most of the remainder.

Saw-log price quotations show little change

Although there has been some fluctuation, saw-log price quotations have not changed significantly in the last few years (fig. 8).

No appreciable change in sawlog price quotations in recent years

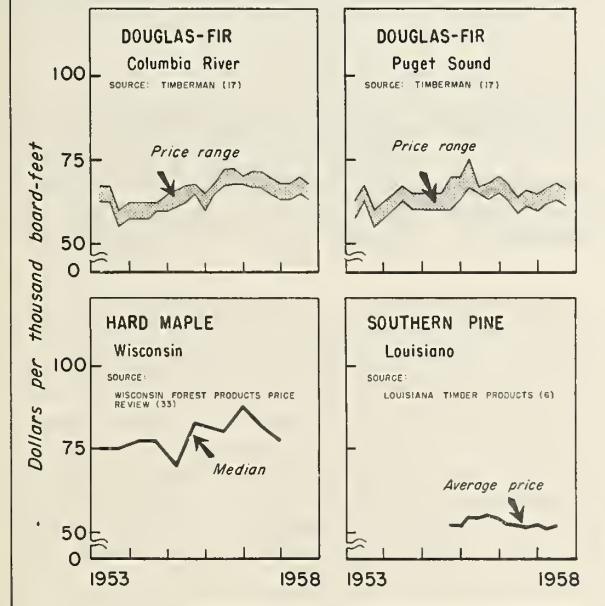


Figure 8

Currently grade No. 1 Douglas-fir saw logs, as reported in the Timberman, are quoted in the Puget Sound and Columbia River log markets at from \$61 to \$68 a thousand board-feet. This same range covers most of the price quotations reported since 1951.

Although comparable data for saw logs in other regions are not available, it seems on the basis of fragmentary information that price quotations of other saw log species, have also shown little change.

Several States publish saw log price quotations (1, 4, 6, 12, 13, 14, 16, 31, 32, 33) based on local scales and grading systems. Illustrative saw log prices for various species taken from some of the State reports issued in 1958 are shown in the following tabulation:

Species:	State and source	Price of sawlogs per thousand bd.-ft.
Southern pine	Louisiana (6)	\$45.00 - 55.00
Gums	Louisiana (6)	25.00 - 45.00
White oak	Illinois (4)	25.00 - 65.00
Hard maple	Wisconsin (33)	¹ 35.00 - 60.00
Yellow birch	Wisconsin (33)	¹ 50.00 - 70.00
Southern pine	North Carolina (13) (Coastal Plain)	² 45.00 - 55.00
Poplar	North Carolina (13) (Coastal Plain)	² 30.00 - 65.00
Pine	Vermont (31) (Northwestern)	³ 40.00 - 42.00

¹ Woods run.

² Doyle rule.

³ Woods run and No. 1.

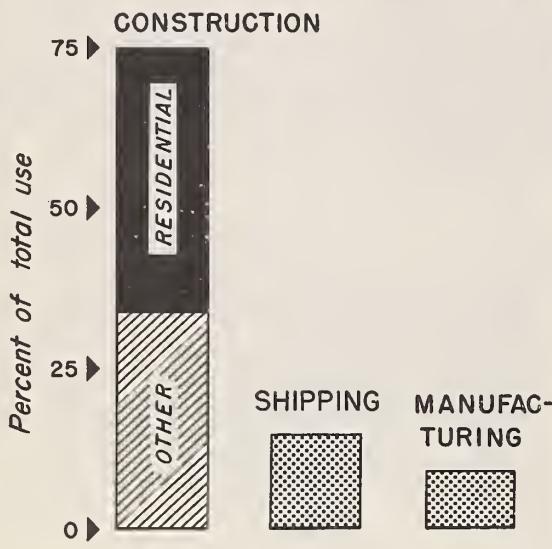
Decline in demand for saw logs reflects drop in economic activity and substitution

The decline in the saw log and lumber production in 1957 and 1958 can largely be traced to four major developments.

First has been the drop in residential construction--the most important single use for lumber (fig. 9). Between May 1955 and February 1958, new private nonfarm housing starts declined 34 percent, falling from a seasonally adjusted annual rate of 1,381 thousand units to 915 thousand units (fig. 10). Second, nonresidential construction, the next largest end use of lumber, declined in the late fall of 1957 and early 1958 largely because of a sharp drop in industrial building (fig. 10). Third has been the decline in industrial production and related economic activity which has affected other lumber markets in manufacturing and shipping. Between August of 1957 and April of 1958, the output of household furniture declined 10 percent, radio and television sets 47 percent, and all manufactured products

Residential construction

the most important single use
for lumber



SOURCE: FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE (19)

Figure 9

13 percent.⁵ During the same period freight car loadings dropped 22 percent.

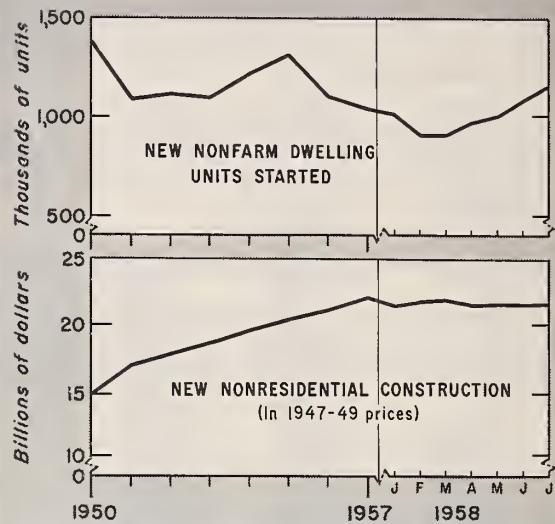
The fourth major development has been substitution of other materials for lumber. Substitution has been going on for a long time, but there is some evidence which indicates that the rate has increased during the past two or three years. For example, per capita consumption of lumber (which averaged around 250 board-feet in the period 1939 to 1950) dropped from 268 board-feet in 1950 to a current level of 201 board-feet (fig. 11). In contrast, per capita consumption of softwood plywood, building board, and container board--important substitutes for lumber in construction and shipping--has increased since 1950.

Some increase in demand expected in the period immediately ahead.

Although the demand for saw logs and lumber has been downward since 1956, it is expected to start rising in the period immediately ahead. While this will largely

⁵ As measured by Federal Reserve indexes 1947-49=100 adjusted for seasonal variation (2).

Drop in sawlog production related to decline in construction



NOTE: DATA FOR 1958 REPRESENT SEASONALLY ADJUSTED ANNUAL RATES.
SOURCE: U.S. DEPARTMENT OF COMMERCE (27)

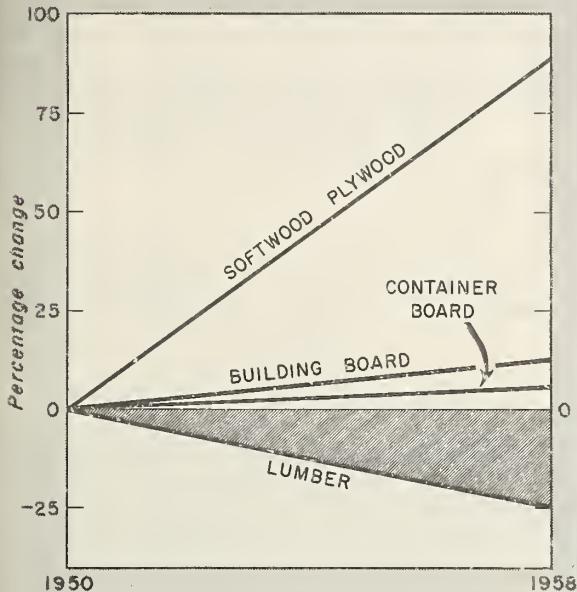
Figure 10

reflect the improvement in general economic conditions and rising levels of construction, particularly residential construction, recent declines in lumber prices in relation to competing materials are expected to have some effect through reducing the rate of substitution of other materials for lumber.

The wholesale price index of lumber (1947-49=100) reached a peak of 130.6 in April of 1956 but dropped thereafter to a low of 115.9 in March and April of 1958, a decline of about 11 percent (29). In contrast, most of the materials which compete with lumber, such as steel, structural clay products, and paperboard, have increased in price during this period (table 6, fig. 12). This divergence in prices has presumably improved the competitive position of lumber.

Substitution may also be reduced to some extent by promotional programs currently being undertaken by lumber manufacturing associations, and by improved marketing practices such as grade marking and packaging of lumber being adopted by many lumber manufacturers. The sharp drop

**Per capita consumption of lumber falling
... competing wood materials rising**



SOURCE: BUREAU OF THE CENSUS, U.S. DEPARTMENT OF COMMERCE (22) (24) (25)

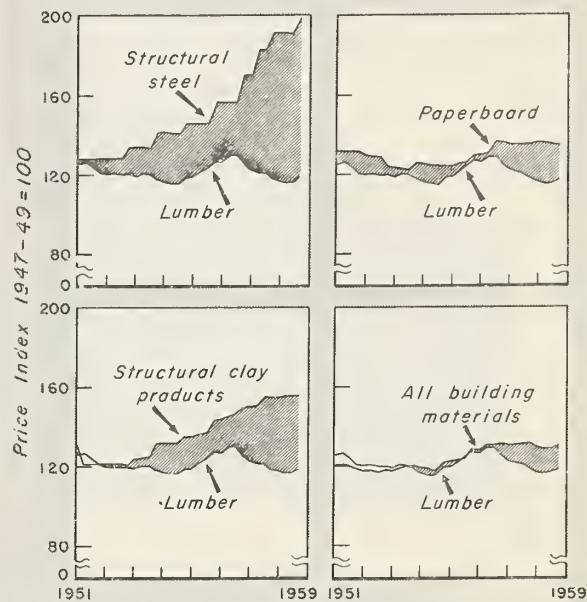
Figure 11

in the number of small sawmills which has occurred in recent years may also result in better manufactured lumber.

Looking further ahead substantial increases expected

During the next decade, further increases are expected in the demand for saw logs and lumber, particularly in residential construction. It is generally anticipated that residential construction will increase substantially in the early 1960's as the upsurge in birth rates that started in the early 1940's results in increased formation of new families. Some further impetus is also expected to come from movement of city populations to suburbs, by the need for larger houses, and by increases in income which will permit an improvement in the general level of housing. Increased family formation and more residential construction will in turn tend to increase demand for radio and television sets, shipping containers, and other items fabricated in whole or part from lumber. Looking further ahead the Forest Service has estimated that by 1975 potential demands for

Lumber prices have declined relative to competing materials in recent months



SOURCE: BUREAU OF LABOR STATISTICS, U.S. DEPARTMENT OF LABOR (29)

Figure 12

saw logs and lumber may be 21 to 41 percent above the level prevailing in the period 1950-56.

THE DEMAND AND PRICE OUTLOOK FOR PULPWOOD

Pulpwood production shows some decline in 1957 and 1958

Pulpwood production in the United States during 1958 is estimated at 33.5 million cords, including about 4 million cords of residues (table 7, fig. 13). This is about 3 percent below production in 1957 and 5 percent below 1956--the peak year in production. Net imports of pulpwood from Canada in 1958 are estimated at 1.7 million cords and withdrawals from stocks, 0.5 million cords. Pulpwood consumption in 1958 is thus expected to amount to 35.7 million cords, or about the same as in 1956 and 1957. In addition to this, it is anticipated that the equivalent of 8.5 million cords of pulpwood will be imported (net imports) in the form of woodpulp, newsprint, and other paper and paperboard.

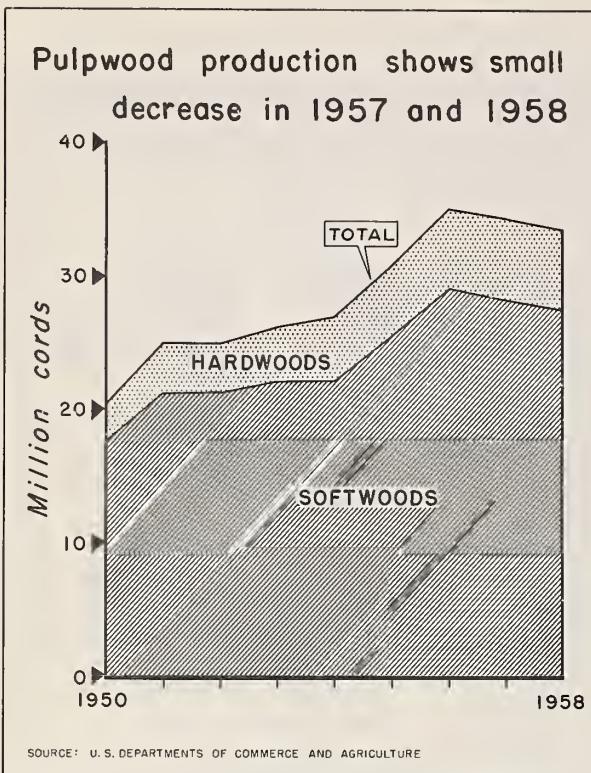


Figure 13

Softwoods preferred for pulpwood

Softwoods, chiefly southern pine, western hemlock, Douglas-fir, spruce, and true firs make up about 82 percent of the pulpwood currently produced. In the South, softwoods comprise about 85 percent of the total cut, in the North 55 percent, and in the West almost 100 percent of the total. Softwoods are preferred over hardwoods for many grades of paper and board because of longer fibre lengths and greater strength for pulp and paper.

Although the proportion of hardwood pulpwood to softwood pulpwood has not changed appreciably for many years, hardwood pulpwood production has climbed from about 0.8 million cords in 1920 to an estimated 6.0 million cords in 1958. The production of hardwoods--chiefly aspen and gums--has been expanding as a result of increased competition for wood, higher prices for softwood timber, and the development of suitable processes for pulping hardwoods.

Pulpwood production concentrated in the South

It is estimated that about 57 percent of the pulpwood produced in the United States in 1958 will come from forests in the South (fig. 14). Pulpwood production in this region

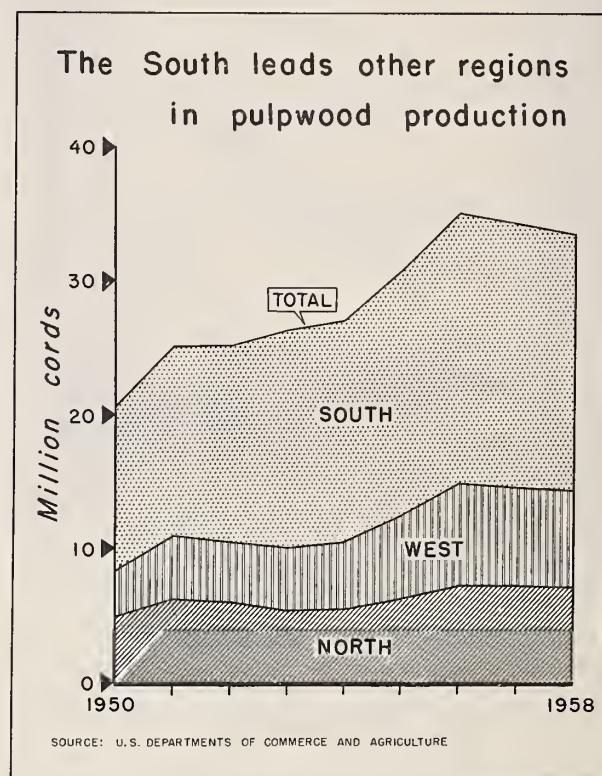


Figure 14

has been increasing rapidly, rising from about 8.1 million cords in 1945 to the estimated 19.2 million cords in 1958. In recent years the use of residues from sawmills and veneer plants has also shown a very rapid increase, rising from 76 thousand cords in 1953 to 1.2 million cords in 1957 (20). During this later year, residues comprised 6 percent of all the pulpwood produced in the South.

In the West expansion has also been rapid and pulpwood production has increased from about 2.5 million cords in 1945 to an estimated 7.2 million cords in 1958. The use of plant residues for pulping is particularly important in this region and currently more than one-third of the wood

used in pulping consists of residues from sawmills and veneer mills. Although the proportion of residues used in pulping has been steadily increasing, there are large quantities of waste material still not utilized.

Pulpwood production in the North has increased slowly in recent years. Most of the increase has been based on the use of hardwoods in the production of semi-chemical and other related pulps.

Pulpwood prices show little change since 1956

Pulpwood prices at local points of delivery have shown little change since 1956 (table 8, fig. 15). In the Southeast, for

Pulpwood prices show considerable variation among regions, depending upon species, availability of local timber supplies, and other factors. Thus, in the Lake States prices of rough pulpwood f.o.b. car currently average about \$24.75 per cord for spruce, \$16.00 for pine, and \$11.75 for aspen and northern hardwoods. In the Northeast, prices f.o.b. car average about \$20.00 per rough cord for spruce and fir and \$14.50 for white pine. In the South the prices per rough cord f.o.b. car average about \$15.00 for pine and \$12.00 for hardwoods.

Several States publish reports containing price quotations for pulpwood at local points of delivery (1, 3, 4, 6, 11, 12, 13, 14, 31, 32, 33). In general, since one unit of measure (the cord) is more or less in standard use, these price reports are fairly representative of the prices received for pulpwood. Illustrative pulpwood prices at local points of delivery taken from some of the State reports issued in 1958 for various pulpwood species are shown in the tabulation below:

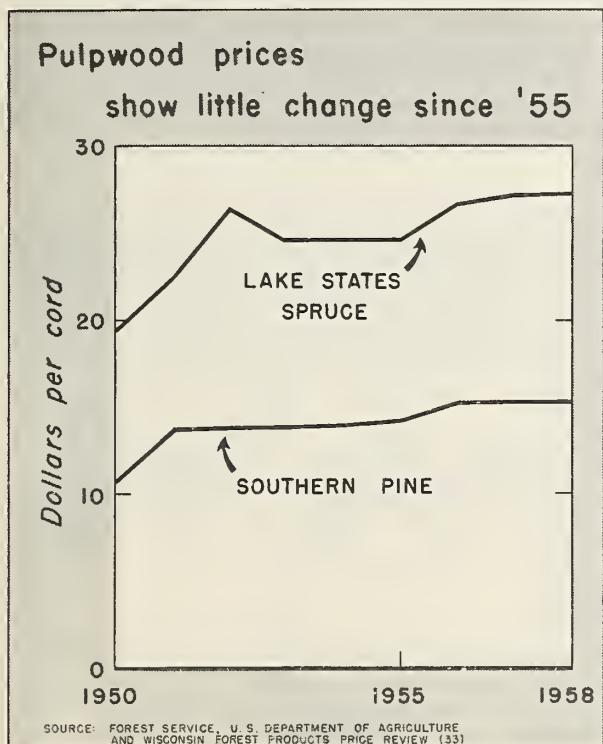


Figure 15

example, the price of rough pine pulpwood at local points of delivery currently amounts to \$15.50 per cord. This is about the same as the price received in 1956 and 1957.

Species:	State and source	Price of rough pulpwood per cord
Southern pine	Louisiana (6)	\$14.80
Hardwoods	Louisiana (6)	12.00
Mixed hardwoods	Wisconsin (33)	114.50 - 15.00
Balsam fir	Wisconsin (33)	122.00 - 23.50
Spruce	Wisconsin (33)	126.00 - 28.50
Pine	Wisconsin (33)	117.50 - 18.50
Southern pine	North Carolina (13)	13.50 - 14.75
Hardwoods	North Carolina (13)	11.00

¹ Delivered at mill.

Decline in demand for pulpwood believed temporary

The recent decline in demand for pulpwood is believed to be only a temporary reversal of a trend which has been almost steadily upward since 1900. Many forecasts by different agencies indicate that the demand for pulpwood in the United States is likely to continue to increase rapidly. The Forest Service for example, has recently estimated that the potential demand for pulpwood⁶ in 1975 may be between 45 and 65 percent higher than 1956 (19).

⁶The demand for pulpwood for consumption in United States pulp mills.

THE DEMAND AND PRICE OUTLOOK FOR VENEER LOGS

Veneer log production shows little change since 1955

The volume of veneer logs produced in the United States in 1958 is estimated at 3.5 billion board-feet (table 9, fig. 16). Total production is thus about the same as in 1956 but slightly higher than in 1957 when 3.3 billion board-feet was produced.

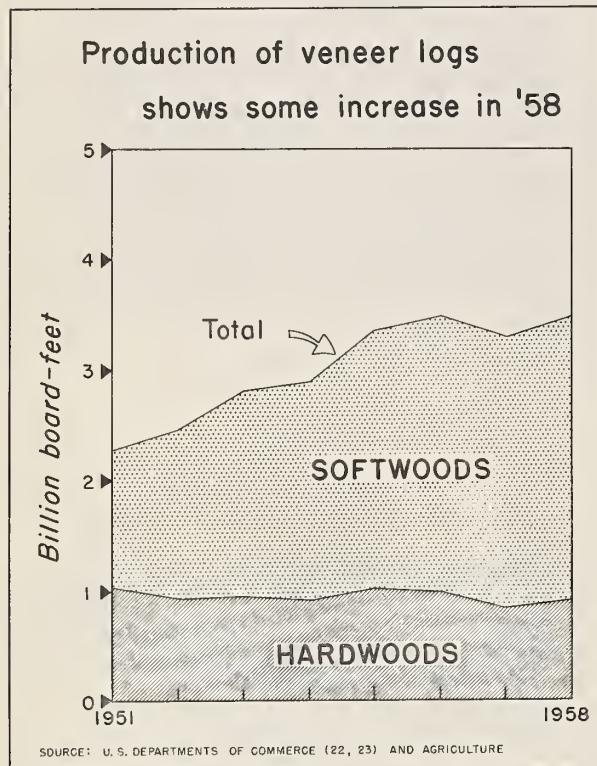


Figure 16

Although total veneer log production has shown little change since 1956, there has been some increase in softwood veneer log production and a small decline in hardwood veneer log production. This is generally in line with long run trends. In the last two decades, for example, production of softwood veneer logs has increased from 460 million board-feet to an estimated 2.6 billion board-feet. This rapid increase can be partly attributed to expanding uses for softwood plywood in construction where substitution of softwood plywood for lumber has advanced rapidly. Development of moisture resistant and waterproof glues that have

permitted use of exterior grades of plywood in exposed locations without risk of glue failure have also contributed to this increase.

Increases in the demand for softwood plywood since 1955 apparently indicate that the substitution of softwood plywood for lumber has been increasing at a rate fast enough to offset the effects of the decline in construction and general economic activity. This in part reflects the fact that the price of softwood plywood in relation to the price of lumber has been declining (fig. 17). Increasing wage rates, particularly in construction, have also tended to increase the advantage of plywood because plywood can be put in place with much less labor than lumber.

There has been little change in the volume of domestic hardwood veneer logs produced since the early 1940's. This presumably reflects in part a growing scarcity of high-quality domestic hardwoods since demands for hardwood veneer and plywood have continued to increase. Such increases have been met by imports of hardwood plywood and veneer, primarily from Japan and Canada.

Softwood plywood prices have declined relative to lumber and other competing materials

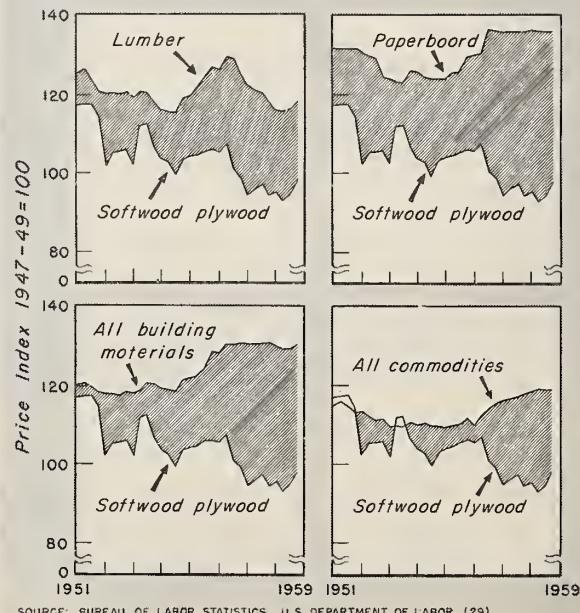


Figure 17

The softwood veneer and plywood industry is highly localized, embracing about 120 mills in the Pacific Northwest and California. Production has been based chiefly on Douglas-fir which has represented from 95 to 98 percent of the wood consumed. On the other hand, the hardwood veneer and plywood industry embraces about 500 mills located in the East. It depends upon gum, birch, yellow poplar and a wide variety of other hardwood species for raw material.

Veneer log price quotations also show little change

In August of 1958, the price quotations for Douglas-fir No. 1 peeler logs ranged between \$113 and \$118 in the Puget Sound log market and from \$105 to \$110 in the Columbia River market (17). Although there has been some fluctuation, this general level has been maintained without significant change during the last 3 or 4 years (fig. 18).

the consequent increased demands for high-grade logs, rising log production costs, and increased stumpage prices resulting from a gradual decline in the availability of high-quality, old-growth timber. Improvement in technology which has permitted the efficient use of lower grade logs has been an offsetting factor in this price increase.

Prices for hardwood veneer logs have also been relatively stable in recent years (fig. 18) although prices by grades and species vary widely. Black walnut veneer logs, for example, currently average about \$270 f.o.b. car in Illinois, whereas sweet gum and yellow-poplar logs used in the manufacture of veneer for baskets, berry boxes, and other containers average about \$45 (4).

Several States publish reports which contain price quotations for veneer logs (1, 4, 13, 14, 31, 33). Illustrative veneer log prices at local points of delivery taken from some of the State reports issued in 1958 for various species and grades of veneer logs are shown in the tabulation below:

Species:	State and source	Price of veneer logs per thousand bd.-ft.
Yellow poplar	North Carolina (13) (Coastal Plain)	1 \$35.00 - 80.00
Hard maple	Wisconsin (33)	70.00 - 140.00
Yellow birch	Wisconsin (33)	160.00 - 285.00
Basswood	Vermont (31) (Eastern)	20.00 - 100.00
Walnut	Illinois (4)	2 100.00 - 350.00
White oak	Illinois (4)	2 100.00 - 125.00

¹ Doyle rule.

² F.O.B. Car.

The above price quotations must be considered as only roughly indicative of values of veneer logs in any particular log market. As in the case of saw logs, there is little information available on actual transaction prices for veneer logs in terms of standard grades and volume units.

Demand likely to increase for both softwood and hardwood veneer logs

Over the next few years, the demand for softwood plywood is likely to increase in response to more substitution of plywood for lumber and rising levels of construction, particularly residential construction. Although softwood plywood was used for one purpose or another in 78 percent of

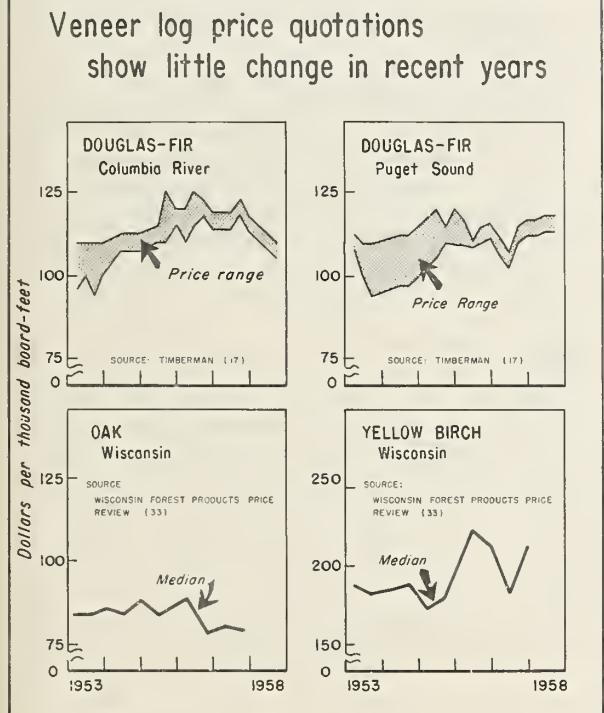


Figure 18

The present level, however, is more than three times as high as in 1940. This large increase in prices reflects the spectacular growth of the softwood plywood industry and

all new nonfarm single-family houses started during the first quarter of 1956, (see tabulation below), there was still a lot of room for expansion (30): It was, for example, used for roof sheathing in only 19 percent of the houses started and for exterior wall sheathing in 12 percent of the starts.

Houses		
	Number	Percent
Total houses started.....	218,600	100
Houses in which plywood was used in one or more components	171,500	78
Roof sheathing.....	42,000	19
Exterior--wall sheathing.....	26,000	12
Exterior--wall facing	12,500	6
Subflooring.....	121,600	56
Interior walls and ceilings	17,400	8
Built-ins, partitions and misc.	70,600	32
Use not reported.....	1,900	1

The demand for hardwood plywood and veneer is also likely to increase, although not as rapidly as softwood plywood, as the demand for furniture, radio, television cabinets, and other similar products rises.

On the basis of the above expectations and related expectations concerning the growth of population and increases in income, the Forest Service has estimated that the demand for veneer logs may increase from 32 to 49 percent above present levels by 1975. Some of this increased demand, particularly for hardwood veneer logs, is likely to be met by imports.

THE DEMAND AND PRICE OUTLOOK FOR OTHER ROUNDWOOD PRODUCTS

Production of other industrial roundwood products shows variable trends--prices vary widely

The production of industrial roundwood products such as cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, and a miscellaneous assortment of other products (fuelwood excluded) amounted to about 700 million cubic feet and accounted for about 8 percent of the industrial roundwood produced in the United States in 1952, the latest year for which estimates by individual product are available. Production of individual products since then has shown variable trends.

Piling and poles.--In 1952, about 28 million cubic feet of piling and 6.5 million

poles were produced in the United States. Since 1952 data on the volume of materials preservatively treated indicates there has been no substantial change in the production of piling, but a modest decline in the production of poles.

Pole and piling prices vary considerably according to length, diameter, and other quality factors. Illustrative prices at local points of delivery, taken from State reports published in 1958 are shown in the tabulation below:

Species:	State and source	Price per pole
Southern pine	North Carolina (13)	30 ft. = \$1.80 - 4.50
		50 ft. = 11.00 - 18.00
		70 ft. = 31.00 - 42.00
Cedar	Wisconsin (33)	30 ft. = 4.50 - 5.00
		30 ft. = 2.45 - 3.25
Southern pine	Louisiana (6)	50 ft. = 14.20 - 17.30
		70 ft. = 37.50 - 55.70

Wood for charcoal.--The production of wood for charcoal manufacture amounted to about 574 thousand cords in 1956, including 149 thousand cords of residues (18). This was slightly above the previous postwar peak reached in 1952, and moderately above production in other postwar years.

In 1956, prices of roundwood delivered at charcoal plants ranged between a low of \$6.90 per cord in the Central States to a high of \$12.70 per cord in the Lake States, and averaged \$11.70 in the Nation. The price of residues averaged \$8.75 for the country.

Consumption of Christmas trees rising slowly

The use of Christmas trees in the United States has been rising slowly and consumption now amounts to more than 40 million trees annually, including about 28 million produced in domestic forests and 12 million imported from Canada. Prices paid to timber growers for Christmas trees vary widely. In Oregon, for example, prices paid on the stump for wild trees generally ranged from 10¢ to 60¢ in 1957 (14) depending on the species and size of trees. A similar range of prices was paid in Montana (8). In contrast, plantation-grown Christmas trees on the stump in Pennsylvania were reported to have sold for prices generally ranging from \$1.50 to \$4 per tree (15).

The relatively high prices paid for plantation-grown trees has attracted many new

producers and resulted in a very large increase in Christmas tree plantings. Recent surveys in Michigan (5), Ohio (7), and Pennsylvania (15) show that total Christmas tree planting in these three States alone amounts to some 20 million trees a year. Trends in Christmas tree planting suggest increasingly strong competition for available markets and lower prices than growers have received in recent years.

THE DEMAND AND PRICE OUTLOOK FOR NAVAL STORES

Reduction in output expected to continue in 1958

The downward trend in rosin production which began in 1957 is expected to continue although at a diminishing rate. Thus, production of about 1,830,000 drums is expected in the 1958 crop year--a 2% decrease from the previous year. (table 10). The expected 6% increase in tall oil rosin production probably will be insufficient to offset anticipated decreases of about 7% in gum rosin and 1 to 2% in steam distilled wood rosin.

Similarly, a slight reduction is likely in overall turpentine output, mainly reflecting a 6% decline in production of gum turpentine. For turpentine, this will be the third consecutive year of reduced output.

Shift in output sources likely to continue

Although, in the aggregate, there has been little change in rosin and turpentine production over the past 3 decades, a shift in output sources has occurred and is likely to continue awhile away from gum and steam distilled wood naval stores and toward naval stores recovered as a byproduct of the kraft paper industry (Fig. 19 and 20). In the years immediately ahead, it is doubtful whether increased production of tall oil rosin and sulphate turpentine will fully offset the declines in other supply sources. At present, rosin production divides about 20-65-15 among gum, steam distilled and sulphate sources.

The peak of steam distilled wood and turpentine output was reached in 1955 and the long term trend, harnessed to a shrinking supply of first growth pine stumps, is downward. This year, steam distilled rosin output will be 14% less than in 1955. The concern of steam distilled naval stores pro-

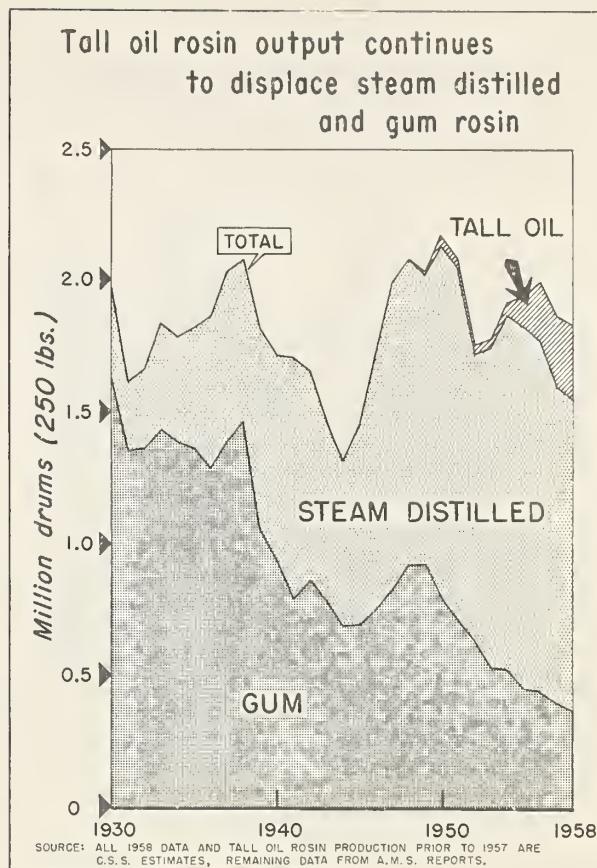


Figure 19

ducers over future sources of supply is evidenced by their increasing interest and investment in the supply of other types.

Except for the immediate post World War II period, 1946-1949, gum naval stores production has been trending downward for about 30 years. Factors which may eventually reverse this trend include an increasing inclination of pulp mills to lease forest tracts for gum farming. Revenue from 5 year gum farming leases approaches the wood pulp value of the tree. Hope also rests in current development of faster growing and higher yielding pines, together with improved forest management and production practices.

The tall oil fractionation plants now operating have a maximum potential capacity capable of doubling present tall oil rosin production. Full utilization of this capacity is still at least several years away. The increasing use of hardwoods in sulphate pulp mills is yielding tall oil with a lower resin acid content. Further, the production

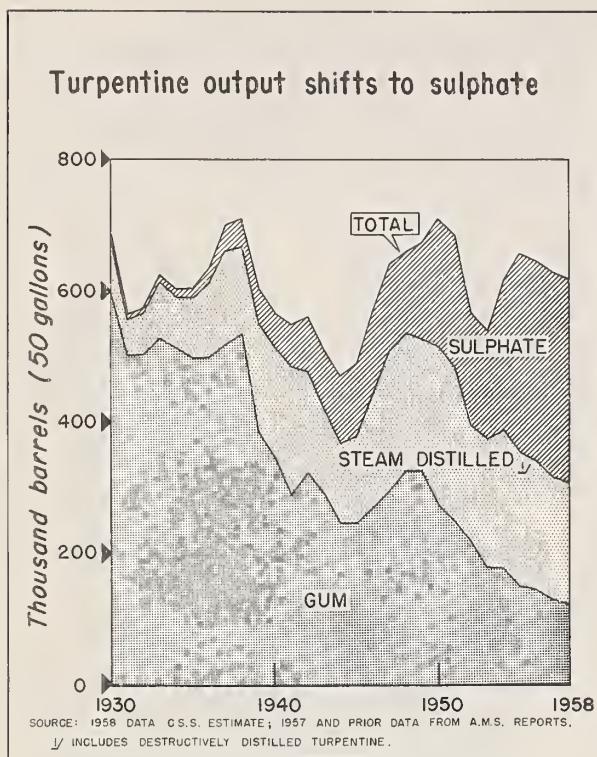


Figure 20

of tall oil rosin is determined in part by competing demands for crude tall oil and on the extent to which the current market can absorb the fatty acids remaining after removal of the rosin.

Ratio of turpentine to rosin output falling

Yields of gum and steam distilled wood turpentine relative to corresponding rosin output has been declining and continues to fall steadily as shown in the following tabulation:

Gallons Turpentine Yield per Drum of Rosin Output

Period (Crop Years Beg. April 1)	Steam Distilled	Gum	Both Types Weighted Avg.
1920-1929	12.1	18.5	17.7
1930-1939	10.3	18.4	16.4
1940-1949	9.3	17.9	13.4
1950-1957	8.0	16.8	10.7

Little change in stocks expected

Change in total stocks of turpentine probably will be negligible next March 31. Rosin

stocks may be slightly lower. Stocks of turpentine will be close to the long time average of 2-1/2 months supply. About 25,000 drums of gum rosin (7% of the crop) probably will be placed in the 1958 loan. All of the pale grades and some, if not all, of the lower grades are likely to be redeemed before the expiration date for redemptions next July 1. Turpentine pledged to the loan is not expected to exceed 6,000 barrels (5% of the crop). About 4/5 of overall rosin stocks and 1/10th of turpentine stocks are held by CCC.

Domestic consumption to approximate 1957 levels

Through August 1958, domestic disappearance of both rosin and turpentine is slightly less than during the same period last year. However, consumption over the remainder of the year is likely to outstrip last year's performance and for the year as a whole should approximate 1957 consumption.

The lower rosin consumption through August reflects in part reduced paper and S-type synthetic rubber production. Output of these commodities April through August is down about 1 and 9%, respectively, from the same period in 1957.

Kraft paper output has felt the cutback more than overall paper production. Through August, output is down 5% from last year. The letdown in the S-type rubber market has been even more severe than indicated by production because rubber stocks have been increasing. Production of both paper and rubber is beginning to increase in line with general industrial recovery from the recent recession. By March 31, 1959, paper output over the naval stores crop year should at least equal that of the previous crop year.

The principal domestic outlets for rosin since 1930 are shown in Figure 21. Consumption has been increasing in paper size, chemicals and rubber; decreasing in paints and soap. These trends are likely to continue. For example, increased production of bleached papers points toward increased requirements of rosin for sizing.

Industrial use of turpentine increasing

Total domestic use of turpentine is not expected to change much in the 1958 crop

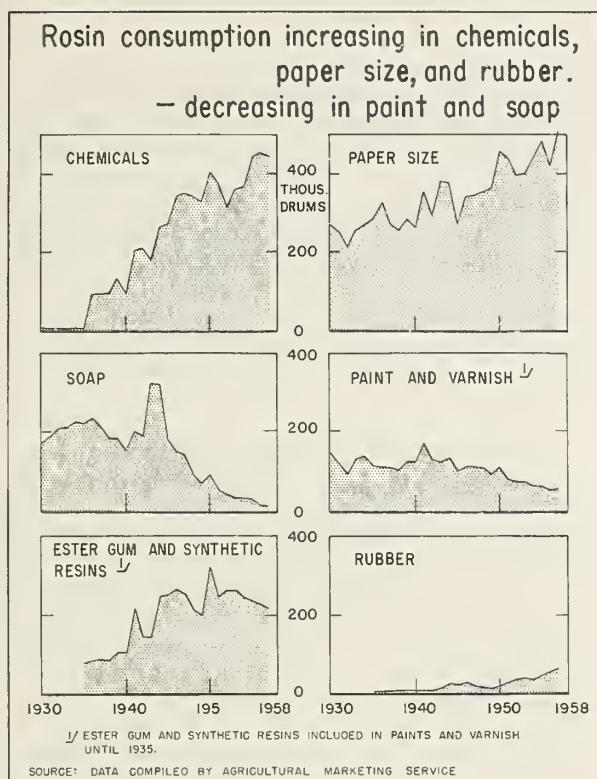


Figure 21

year. However, industrial consumption is likely to continue increasing and, perhaps, at the expense of sales in small containers to householders for paint thinning, cleaning and other uses (Figure 22). The most recent trend toward industrial use of turpentine began in 1948 when industrial and retail use of turpentine was allocated about 1 to 5. By the 1957 crop year, this proportion had changed to about 7 to 3. The trend is expected to continue in the 1958 crop year with slightly lower turpentine usage in small containers and increased industrial utilization, particularly in the production of synthetic pine oil, beta pinene and insecticides.

Slowdown of European industrial activity may affect exports

Although French, Portuguese, and Greek production and export availabilities are expected to be lower in 1958, a smaller quantity of U. S. rosin may be exported. Western European requirements for rosin probably will be lower because of a slowdown of industrial activity in the United Kingdom, Belgium, Netherlands and to a

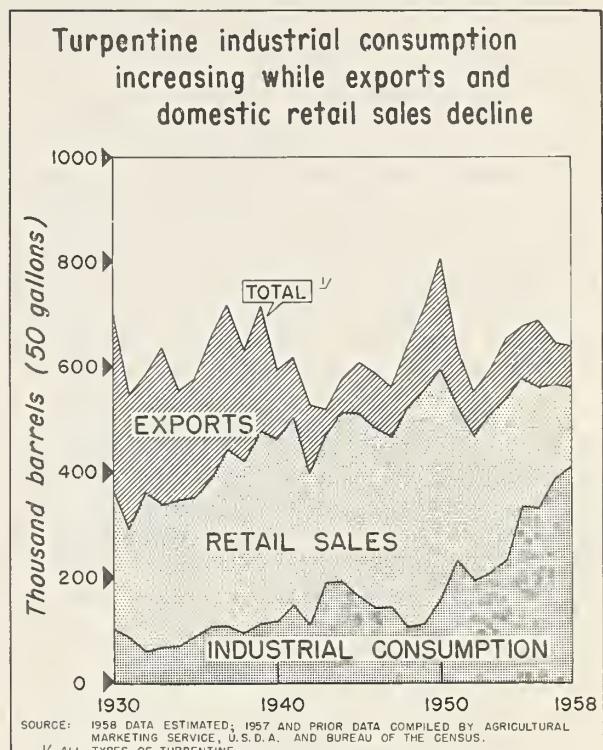


Figure 22

lesser extent, Germany. No deepening of this slight recession appears likely and it may be over before the close of the crop year. Not much change is anticipated in turpentine exports which are not as closely related to industrial activity.

Foreign production outside the Communist Bloc countries is estimated to be about 20,000 drums of rosin and 8,000 barrels of turpentine less than a year ago. However, foreign stocks were slightly higher on January 1, 1958 than a year earlier and carry-overs this year are likely to be minimized. Net exports from the Communist Bloc during 1958 are expected to be higher than last year.

Importance of export outlet declining

Rosin and turpentine exports this year will account for about 28 and 12% of their respective outputs. In contrast, before World War II, 50% of rosin production and 40% of the turpentine crop were exported. Since World War II, exports on the average have absorbed 30% of rosin production and 18% of turpentine output. Both foreign production

and consumption have been trending upward since World War II and the export outlet for American rosin and turpentine is likely to remain substantial.

Rosin prices higher, turpentine lower

Through September of this crop year, rosin prices have averaged 4% more than over the same period in 1957 while turpentine prices were 7% less than last year. Turpentine and high grade rosin prices are likely to rise before the beginning of the next crop year. Not much change is likely in prices of medium grade rosins.

Over the long run, rosin prices are expected to rise in order to meet requirements of increased worldwide industrial productivity. Barring a national emergency, no significant change in turpentine prices is likely from the 50-60¢ per gallon level of the past several years.

OUTLOOK SUMMARY

The volume of industrial roundwood (all round timber products except fuelwood) produced in the United States in 1958 is estimated at 8.6 billion cubic feet. This is about 2 percent less than estimated production in 1957 and 10 percent below production in 1956. Stumpage prices showed a steady decline in 1957 and the first two quarters of 1958, and currently average considerably below prices received in 1956.

The drop in the production of industrial roundwood and stumpage prices has been related to a general decline in economic activity. In recent weeks, however, industrial production, employment, and incomes have increased and housing starts, the most important source of demand for lumber, have reached the highest rate since the summer of 1956. This brightening economic outlook should mean a rising demand for industrial roundwood products such as pulpwood, veneer logs, and saw logs.

Saw logs and lumber

The volume of saw logs and lumber produced in 1958 is estimated at 33.0 billion board-feet. This is about 2 percent less than production in 1957 and 12 percent less than production in 1956. The West is expected to account for about 54 percent of

total production, the South 33 percent, and the North 13 percent.

In contrast to the sharp decline in production, saw log price quotations have shown little change in recent years. According to prices quoted in the Timberman, the price of grade No. 1, Douglas-fir saw logs in the Puget Sound and Columbia River log markets of western Oregon and Washington have generally ranged between \$55 and \$75 per thousand board-feet since 1951. On the basis of fragmentary information, it seems that prices of other saw log species in other regions have also remained fairly stable.

The drop in saw log and lumber production reflects a decrease in economic activity and continuing substitution of other materials for lumber--including both wood items such as plywood and paperboard and nonwood materials. The long-term outlook, nevertheless indicates expanding markets for saw logs and lumber along with rising levels of construction and business activity.

Since 1956, the price of lumber has declined about 11 percent while the price of most of the materials which compete with lumber have been increasing. This divergence in prices has presumably improved the competitive position of lumber and if continued should tend to slow the rate of substitution of other materials for lumber.

Substitution may also be reduced to some extent by promotional programs currently being undertaken by the various lumber manufacturing associations and by improved marketing practices such as grade marking, trade marking, and packaging of lumber being adopted by many lumber manufacturers.

Pulpwood

Pulpwood production in 1958 is estimated at 33.5 million cords including about 4 million cords of residues. This is about 3 percent below production in 1957 and 5 percent below the peak year 1956.

Softwoods such as southern pine, western hemlock, Douglas-fir, spruce, and true firs are expected to make up about 82 percent of the pulpwood produced in 1958. About 57 percent of the pulpwood cut in 1958 will come from the South, 22 percent

from the West, and the remaining 21 percent from forests in the North.

As was the case with saw logs, pulpwood prices have not changed much recently. In the Southeast, for example, the price of rough pine pulpwood at local points of delivery currently amounts to \$15.50 per cord. This is nearly the same as prices received in 1956 and 1957 but reflects a modest increase over the \$14.40 per cord received in 1955.

The decrease in pulpwood production since 1956 marks what is believed to be a temporary reversal in a trend that has been sharply upward for many years. There are a variety of forecasts made by different agencies which indicate that the demand for pulpwood in the United States is likely to increase rapidly. The Forest Service for example has estimated that the demand for pulpwood in 1975 may be between 45 and 65 percent higher than 1956.

Veneer logs

The volume of veneer logs produced in 1958 is estimated at 3.5 billion board-feet. Total production is thus about the same as in 1956, but slightly higher than in 1957 when 3.3 billion board-feet was produced. Although total veneer log production has shown little change since 1956, there has been some increase in softwood veneer log production and a small decline in hardwood log production. This is generally in line with long run trends. In the last two decades the production of softwood veneer logs has increased from 460 million board-feet to an estimated 2.6 billion board-feet. In contrast, there has been little change in the volume of hardwood veneer logs produced since the early 1940's.

Currently the price quotations for Douglas-fir grade No. 1 veneer logs as reported by the Timberman range from \$113 to \$118 in the Puget Sound log market and from \$105 to \$110 in the Columbia River market. Although there has been some fluctuation, this price level has been maintained without significant change during the past 3 or 4 years. Prices for hardwood veneer logs have displayed a similar stability.

The outlook for veneer logs is highly favorable. Demands for softwood veneer logs because of continued substitution of softwood plywood for lumber, particularly

in residential construction, are likely to increase more rapidly than demands for hardwood veneer logs.

Other roundwood timber products.--The production of other industrial roundwood timber products, including cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, and a miscellaneous assortment of other products amounted to about 700 million cubic feet in 1952. Since then trends in the production of these products have been variable--some increasing and others decreasing.

Christmas trees

The use of Christmas trees in the United States has been rising slowly and consumption is now in excess of 40 million trees annually, including about 28 million produced in domestic forests and 12 million imported from Canada. Stumpage prices paid to timber growers vary widely, ranging from as low as 10¢ per tree for wild trees to \$4 or more for plantation-grown trees.

The relatively high prices paid for plantation-grown trees in the past has attracted new producers and resulted in large increases in Christmas tree plantings. This has advanced to the point that recent surveys in Michigan, Ohio, and Pennsylvania show that total Christmas tree planting in these three States alone amounts to some 20 million trees a year. This high volume of planting suggests the possibility of sharply increased competition for available markets and lower prices than growers have received in recent years.

Naval Stores--Overall naval stores production is likely to be lower in 1958. Declines in gum and steam distilled wood rosin should more than offset increased tall oil rosin. The expected slight reduction in overall turpentine output reflects lower gum turpentine production. Little change is anticipated in domestic consumption of both rosin and turpentine and in turpentine exports. Rosin exports are likely to be less than a year ago. No change in turpentine stocks and a slight reduction in rosin stocks is expected on March 31, 1959. No increase is anticipated in CCC holdings; conversely, these may decline.

Turpentine and high grade rosin prices probably will rise before the beginning of the next crop year. Not much price change is expected in medium grade rosin.

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APPENDIX

TABLE 1.--Estimated market value of forest products¹ and farm crops harvested in the United States, by State, 1954
(Thousands of dollars)

State, region and section	Market value of forest products harvested ¹	Market value of farm crops harvested ²				
		Total	Corn	Cotton	Wheat	All other
Maine.....	56,900	90,854	530	--	--	90,324
New Hampshire.....	18,600	18,197	802	--	--	17,395
Vermont.....	19,600	48,969	4,157	--	--	44,812
Massachusetts.....	4,400	55,138	2,009	--	--	53,129
Rhode Island.....	200	5,466	289	--	--	5,177
Connecticut.....	1,400	58,935	2,622	--	--	56,313
New York.....	33,800	363,136	51,444	--	22,308	289,384
New Jersey.....	3,500	110,641	14,808	--	3,628	92,205
Pennsylvania.....	39,300	353,820	97,198	--	35,772	220,850
Northeast.....	177,700	1,105,156	173,859	--	61,708	869,589
Ohio.....	16,300	686,427	301,137	--	93,117	292,173
Indiana.....	11,100	684,670	368,133	--	78,727	237,810
Illinois.....	9,500	1,219,938	654,839	288	95,185	469,62b
Michigan.....	40,900	430,701	118,415	--	60,135	252,151
Wisconsin.....	34,200	534,456	188,036	--	2,741	343,579
Minnesota.....	24,900	827,464	340,865	--	22,325	464,274
Iowa.....	4,100	1,249,280	806,496	--	4,495	438,289
Missouri.....	22,900	489,297	137,167	76,732	66,014	209,384
North Dakota.....	700	436,682	36,860	--	144,425	255,397
South Dakota.....	1,200	403,550	156,142	--	55,854	191,554
Nebraska.....	1,300	642,562	283,794	--	122,346	236,422
Kansas.....	3,300	647,887	68,708	--	358,838	220,341
North Central.....	170,400	8,252,914	3,460,592	77,020	1,104,202	3,611,100
Total North.....	348,100	9,358,070	3,634,451	77,020	1,165,910	4,480,689
Delaware.....	3,000	27,715	9,674	--	1,822	16,219
Maryland.....	14,000	114,507	32,947	(3)	10,279	71,281
Virginia.....	73,100	292,683	51,411	2,118	13,427	225,727
West Virginia.....	24,000	67,461	13,514	--	2,126	51,821
North Carolina.....	100,700	819,457	78,694	70,042	12,465	658,256
South Carolina.....	62,400	262,730	19,435	94,753	5,325	143,217
Georgia.....	144,100	340,240	54,265	117,304	4,290	164,381
Florida.....	54,300	397,063	13,170	4,806	--	379,087
Southeast.....	475,600	2,321,856	273,110	289,023	49,734	1,709,989
Kentucky.....	30,700	433,963	91,653	2,169	10,579	329,562
Tennessee.....	35,800	317,792	56,847	102,623	7,291	151,031
Alabama.....	102,000	248,234	47,138	139,309	--	61,787
Mississippi.....	83,700	421,621	42,390	307,971	--	71,260
Arkansas.....	67,300	415,996	12,894	251,007	--	152,095
Louisiana.....	64,700	279,092	17,623	106,843	--	154,626
Oklahoma.....	6,100	309,229	5,356	49,818	141,911	112,144
Texas.....	69,800	1,328,794	45,981	684,829	63,648	534,336
South Central.....	460,100	3,754,721	319,882	1,644,569	223,429	1,566,841
Total South.....	935,700	6,076,577	592,992	1,933,592	273,163	3,276,830
Montana.....	38,900	294,169	4,085	--	153,852	136,232
Idaho.....	68,300	258,954	4,367	--	68,910	185,677
Wyoming.....	2,800	55,183	2,337	--	5,748	47,098
Colorado.....	6,100	210,197	22,091	--	34,594	153,512
New Mexico.....	10,300	99,105	1,557	59,549	1,491	36,508
Arizona.....	10,700	276,541	856	166,853	561	108,271
Utah.....	2,400	74,353	3,420	--	11,798	59,135
Nevada.....	1,400	14,970	276	590	606	13,498
Mountain.....	140,900	1,283,472	38,989	226,992	277,560	739,931
Washington.....	270,700	394,883	3,819	--	149,069	241,995
Oregon.....	552,700	210,017	2,706	--	55,250	152,061
California.....	266,900	1,566,908	14,126	277,119	18,909	1,256,754
Pacific.....	1,090,300	2,171,808	20,651	277,119	223,228	1,650,810
Total West.....	1,231,200	3,455,280	59,640	504,111	500,788	2,390,741
Total United States.....	2,515,000	18,889,927	4,287,083	2,514,723	1,939,861	10,148,260

¹ Value of logs and bolts, Christmas trees, pine gum and maple sap at local points of delivery.

² Includes the value of 79 crops harvested. See 1956 Agricultural Statistics, page 441 for list of crops included.

³ Less than 500 dollars.

Source: Forest Service and Agricultural Marketing Service, U. S. Department of Agriculture

TABLE 2.--Estimated production, net imports, and new supply of industrial roundwood¹ (fuelwood excluded) in the United States, 1900-1958
(Million cubic feet)

Year	Total			Saw logs			Veneer logs			Pulpwood			Other products ²
	Domestic production	Net imports	New supply ³	Domestic production	Net imports ⁴	New supply ^{3,5}	Domestic production	Net imports ⁶	New supply ³	Domestic production	Net imports ⁷	New supply ^{3,8}	New supply
1900.....	7,285	* 140	7,140	5,680	* 175	5,505	5	--	5	135	35	170	1,460
1901.....	7,580	* 110	7,470	5,930	* 150	5,780	5	--	5	150	40	190	1,490
1902.....	7,880	* 60	7,820	6,180	* 110	6,070	10	--	10	160	50	210	1,525
1903.....	8,215	* 140	8,075	6,445	* 195	6,255	15	--	15	175	55	230	1,575
1904.....	8,490	* 150	8,340	6,675	* 205	6,470	20	--	20	190	60	250	1,600
1905.....	8,625	* 90	8,535	6,755	* 155	6,600	35	--	35	195	65	260	1,640
1906.....	9,225	* 95	9,130	7,145	* 170	6,975	60	--	60	225	75	300	1,800
1907.....	9,555	* 115	9,440	7,145	* 215	6,930	65	--	65	235	100	335	2,110
1908.....	8,725	* 80	8,645	6,520	* 160	6,360	70	--	70	205	80	285	1,930
1909.....	9,290	* 50	9,240	6,910	* 155	6,760	80	--	80	245	105	350	2,050
1910.....	9,315	* 80	9,235	6,910	* 215	6,695	90	--	90	240	135	375	2,075
1911.....	9,040	* 150	8,890	6,680	* 290	6,385	80	--	80	260	140	400	2,020
1912.....	9,350	* 145	9,205	6,990	* 295	6,695	80	--	80	270	150	415	2,015
1913.....	9,185	* 165	9,020	6,835	* 320	6,510	80	--	80	275	155	430	1,995
1914.....	8,580	* 15	8,565	6,290	* 185	6,110	85	--	85	280	170	450	1,925
1915.....	8,035	130	8,165	9,750	* 35	5,715	85	--	85	315	170	480	1,885
1916.....	8,545	165	8,710	6,185	* 10	6,175	90	--	90	340	175	515	1,930
1917.....	7,955	170	8,125	5,570	5	5,575	90	--	90	360	165	530	1,930
1918.....	7,320	180	7,500	4,955	20	4,975	95	--	95	345	160	510	1,920
1919.....	7,735	125	7,860	5,370	* 55	5,315	105	--	105	340	180	520	1,915
1920.....	7,800	195	7,995	5,440	* 55	5,380	80	--	80	385	250	640	1,890
1921.....	6,585	145	6,735	4,505	* 80	4,430	75	--	75	290	225	515	1,720
1922.....	7,610	295	7,900	5,480	* 60	5,420	90	--	90	345	355	700	1,695
1923.....	8,550	340	8,890	6,375	* 75	6,295	115	--	115	355	415	770	1,705
1924.....	8,270	270	8,545	6,140	* 155	5,980	115	--	115	365	425	790	1,655
1925.....	8,390	330	8,720	6,375	* 120	6,255	135	--	135	385	450	835	1,495
1926.....	8,235	370	8,610	6,180	* 145	6,035	145	--	145	425	515	940	1,490
1927.....	7,825	315	8,140	5,790	* 205	5,585	175	(*)	170	425	520	945	1,435
1928.....	7,720	280	8,000	5,710	* 275	5,435	175	* 5	175	445	555	1,005	1,385
1929.....	8,090	325	8,415	6,020	* 255	5,765	200	* 5	195	495	585	1,080	1,380
1930.....	6,385	375	6,755	4,560	* 175	4,385	155	* 5	150	470	555	1,025	1,195
1931.....	4,665	325	4,990	3,105	* 150	2,960	125	* 5	120	460	475	935	970
1932.....	3,425	315	3,740	2,100	* 120	1,980	120	(*)	115	375	435	815	830
1933.....	4,080	345	4,425	2,665	* 145	2,520	125	* 5	120	460	490	950	835
1934.....	4,370	345	4,710	2,925	* 165	2,760	130	* 5	125	460	510	975	855
1935.....	5,115	425	5,740	3,565	* 135	3,630	145	* 5	140	505	565	1,070	895
1936.....	6,015	560	6,370	4,295	* 95	3,995	165	* 5	160	580	660	1,240	975
1937.....	6,410	610	6,645	4,505	* 115	4,015	195	* 5	195	685	730	1,415	1,020
1938.....	5,585	475	5,950	3,860	* 70	3,680	195	(*)	195	610	540	1,155	920
1939.....	6,395	535	6,930	4,470	* 60	4,410	210	(*)	210	750	595	1,345	965
1940.....	6,990	400	7,925	4,845	* 35	5,340	235	* 5	230	950	440	1,390	965
1941.....	8,060	650	8,570	5,680	105	5,630	265	* 5	260	1,085	550	1,655	1,030
1942.....	8,090	720	9,840	5,645	170	6,830	305	* 5	300	1,140	555	1,715	1,000
1943.....	7,565	575	8,775	5,325	85	6,020	280	* 15	265	1,035	505	1,570	920
1944.....	7,460	560	8,170	5,115	100	5,385	270	* 10	260	1,170	470	1,620	905
1945.....	6,615	680	7,570	4,365	100	4,745	250	* 10	240	1,150	590	1,740	845
1946.....	7,720	810	8,255	5,295	90	5,200	255	* 5	250	1,275	720	1,910	890
1947.....	8,100	815	8,615	5,500	* 5	5,260	275	* 5	265	1,385	825	2,145	940
1948.....	8,380	1,080	9,075	5,750	190	5,645	290	(*)	295	1,490	885	2,290	850
1949.....	7,355	935	8,550	5,000	140	5,345	320	(*)	320	1,290	790	2,135	745
1950.....	8,535	1,385	9,975	5,905	455	6,330	345	10	350	1,510	925	2,520	770
1951.....	8,745	1,205	9,730	5,780	235	5,895	395	10	405	1,845	955	2,705	730
1952.....	8,750	1,160	9,890	5,820	275	6,140	420	10	430	1,810	875	2,620	700
1953.....	8,825	1,225	9,945	5,710	330	5,915	475	20	500	1,885	870	2,780	750
1954.....	8,770	1,195	10,080	5,650	365	6,070	490	35	520	1,890	795	2,750	740
1955.....	9,355	1,295	10,705	5,810	430	6,250	575	45	625	2,190	820	3,050	780
1956 ¹⁰	9,645	1,375	10,770	5,860	420	6,135	580	50	630	2,475	905	3,275	730
1957 ¹⁰	8,825	1,190	10,060	5,220	335	5,630	555	55	610	2,370	800	3,140	680
1958 ¹⁰	8,640	1,205	9,855	5,125	350	5,445	580	60	640	2,270	795	3,105	665

¹ Includes all products, except fuelwood, commonly cut from round sections of trees.

² Includes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts and a miscellaneous assortment of similar items.

³ Columns may not add to total because of rounding.

⁴ Net imports of lumber converted to cubic feet roundwood. Small quantities of imported saw logs (roundwood form) are included under domestic production.

⁵ Includes changes in stocks beginning in 1935.

⁶ Net imports of veneer logs represent the equivalent net imports of veneer and plywood converted to board-feet log scale, and then to cubic feet roundwood. The small volume of veneer logs imported (roundwood form) are included under domestic production.

⁷ Includes net pulpwood imports (in roundwood form) and the pulpwood equivalent of the net woodpulp and paper and paperboard imports.

⁸ Includes changes in stocks beginning in 1941.

⁹ Less than 2.5 million cubic feet.

¹⁰ Preliminary. Subject to revision.

* Net imports.

Source: Based on data published by the Department of Commerce and Agriculture and estimates of the Forest Service.

TABLE 3.--Stumpage prices for selected species, 1910-58
(Dollars per thousand board-feet)

Year and quarter	Douglas-fir ¹	Southern-Pine ²	Sugar pine ³	Ponderosa Pine ³
1910.....	2.20	1.50	4.30	3.60
1911.....	2.30	2.80	2.50	2.50
1912.....	2.30	1.50	3.50	2.70
1913.....	1.70	1.70	3.30	2.20
1914.....	1.60	2.90	3.00	2.00
1915.....	2.90	2.10	3.40	2.50
1916.....	1.20	3.20	3.50	2.90
1917.....	1.60	3.40	2.80	2.20
1918.....	1.80	3.00	3.40	2.70
1919.....	2.40	3.70	3.40	3.00
1920.....	1.80	4.40	5.00	3.70
1921.....	1.90	3.70	4.20	3.20
1922.....	2.50	2.80	3.80	4.00
1923.....	2.50	3.00	4.40	3.90
1924.....	2.20	3.50	4.20	3.50
1925.....	2.10	3.20	4.40	3.60
1926.....	2.20	3.60	4.50	3.70
1927.....	2.50	3.50	4.00	3.40
1928.....	2.90	3.60	3.20	2.50
1929.....	2.70	3.50	4.60	3.60
1930.....	3.30	3.20	6.30	3.60
1931.....	2.90	3.40	4.60	4.20
1932.....	1.70	2.80	3.70	2.60
1933.....	1.20	2.70	--	--
1934.....	1.50	2.90	3.50	2.50
1935.....	1.70	4.50	3.10	2.40
1936.....	2.10	--	2.80	2.20
1937.....	1.60	5.30	2.80	2.20
1938.....	2.50	7.30	3.50	2.50
1939.....	--	5.80	3.10	2.40
1940.....	2.30	4.50	3.00	2.20
1941.....	3.60	10.80	3.40	2.60
1942.....	--	8.90	4.80	2.70
1943.....	--	8.70	4.20	5.00
1944.....	5.20	10.90	5.20	4.00
1945.....	5.00	9.30	7.30	5.60
1946.....	6.60	8.90	7.20	5.80
1947.....	9.90	10.90	12.50	8.30
1948.....	19.90	16.40	16.20	14.60
1949.....	11.10	19.70	18.90	17.60
1950.....	16.40	26.70	25.00	18.30
1951.....	25.40	34.60	40.40	33.60
1952.....	25.80	38.50	36.40	27.40
1953.....	20.20	34.20	30.20	25.90
1954.....	16.20	29.70	31.20	27.20
1955.....	28.90	32.00	30.00	26.10
1956.....	37.70	37.40	34.90	27.20
1957 - 1st quarter.....	33.80	32.30	34.70	31.60
2nd quarter.....	28.40	32.00	35.90	21.80
3rd quarter.....	25.30	30.30	28.40	21.30
4th quarter.....	23.10	30.70	25.90	25.30
1958 - 1st quarter.....	21.50	30.30	25.00	22.60
2nd quarter.....	20.60	30.65	18.30	19.40

¹ 1910-31 National Forest timber sales, all species Washington and Oregon; 1932-41 all species western Washington and western Oregon; 1944-56, National Forest and Bureau of Land Management sales Douglas-fir only in western Washington and western Oregon; 1957-58 National Forest sales, Douglas-fir only in western Washington and western Oregon. All U.S. Forest Service National Forest prices in this table are the bid prices for timber sold on a Scribner C log scale basis, including Knutson-Vandenberg Act deposits for stand improvement but excluding cooperative deposits and slash-disposal payments.

² 1910-34 stumpage prices of privately owned second-growth southern pine timber, 1935-49 National Forest timber sales all species; 1950-58 National Forest timber sales pine only.

³ 1910-58 National Forest timber sales, California.

TABLE 4.--Lumber production, imports, exports, and consumption in the United States, for selected years 1899-1958

Year	Domestic production	Imports	Exports	Stock changes	Apparent consumption	Per capita consumption
	<i>Billion board-feet</i>	<i>Board-feet</i>				
1899.....	35.1	0.7	1.5	--	34.3	458
1905.....	43.5	.8	1.8	--	42.5	507
1910.....	44.5	1.0	2.3	--	43.2	468
1915.....	37.0	1.1	1.3	--	36.8	366
1920.....	35.0	1.4	1.7	--	34.7	326
1925.....	41.0	1.8	2.6	--	40.2	347
1930.....	29.4	1.2	2.4	--	28.2	229
1931.....	20.0	.7	1.7	--	19.0	153
1932.....	13.5	.4	1.2	--	12.7	102
1933.....	17.2	.4	1.3	--	16.3	130
1934.....	18.8	.3	1.3	--	17.8	141
1935.....	22.9	.4	1.3	-1.3	23.3	183
1936.....	27.6	.7	1.3	1.3	25.7	201
1937.....	29.0	.7	1.4	2.4	25.9	201
1938.....	24.8	.5	1.0	.7	23.6	182
1939.....	28.8	.7	1.1	--	28.4	217
1940.....	31.2	.7	1.0	-3.4	34.3	260
1941.....	36.5	1.4	.7	1.0	36.2	271
1942.....	36.3	1.5	.5	-6.5	43.8	325
1943.....	34.3	.9	.3	-3.9	38.8	284
1944.....	32.9	1.0	.4	-1.1	34.6	250
1945.....	28.1	1.1	.4	-1.8	30.6	219
1946.....	34.1	1.2	.6	1.2	33.5	237
1947.....	35.4	1.3	1.4	1.5	33.8	235
1948.....	37.0	1.9	.6	1.9	36.4	248
1949.....	32.2	1.6	.7	-1.3	34.4	231
1950.....	38.0	3.4	.5	.2	40.7	268
1951.....	37.2	2.5	1.0	.8	37.9	245
1952.....	37.5	2.5	.7	-.3	39.6	252
1953.....	36.7	2.8	.6	.8	38.1	239
1954.....	36.4	3.1	.7	-.4	39.2	241
1955.....	37.4	3.6	.8	-.1	40.3	244
1956.....	37.7	3.4	.8	.9	39.4	234
1957 ¹	33.6	3.0	.8	-.5	36.3	212
1958 ¹	33.0	3.0	.8	.2	35.0	201

¹ Preliminary. Subject to revision.

Source: Bureau of the Census, U. S. Department of Commerce (24); Forest Service, U. S. Department of Agriculture

Note. Estimates of lumber production in 1957 and 1958 are based on data published by the National Lumber Manufacturers Association (9, 10).

TABLE 5.—Estimated lumber production in the United States, by regions and by hardwoods and softwoods, selected years 1899-1958¹

Year	All regions			North			South			West, total ²
	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	
1899.....	Billion board-feet									
1905.....	35.1	8.9	26.2	18.6	6.6	12.0	12.9	2.3	10.7	3.5
1910.....	43.5	10.5	33.0	20.1	7.3	12.8	16.5	3.3	13.3	6.9
1915.....	44.5	10.5	34.0	15.6	7.5	8.0	20.0	2.9	17.1	8.9
1920.....	37.0	7.5	29.5	10.0	4.7	5.3	18.8	2.8	16.0	8.2
1925.....	35.0	7.4	27.6	6.9	3.8	3.0	16.0	3.5	12.5	12.1
1930.....	41.0	7.7	33.3	6.0	3.6	2.5	19.6	4.1	15.5	15.3
1935.....	29.4	6.1	23.2	4.5	2.9	1.6	12.6	3.2	9.4	12.2
1940.....	22.9	4.7	18.2	3.8	2.4	1.5	10.0	2.3	7.7	9.1
1941.....	31.2	5.5	25.6	4.6	2.9	1.7	13.3	2.6	10.7	13.2
1942.....	36.5	6.7	29.9	5.3	3.3	2.0	15.5	3.3	12.2	15.7
1943.....	36.3	6.8	29.5	5.1	3.2	2.0	15.6	3.6	12.0	15.6
1944.....	34.3	7.4	26.9	4.9	3.2	1.7	14.3	4.2	10.2	15.0
1945.....	32.9	7.8	25.2	5.4	3.5	1.9	12.6	4.3	8.3	15.0
1946.....	28.1	7.0	21.1	4.5	2.8	1.7	11.5	4.1	7.4	12.1
1947.....	34.1	8.3	25.9	4.9	3.1	1.9	14.7	5.1	9.6	14.4
1948.....	35.4	7.4	28.0	5.4	3.4	2.0	13.6	4.0	9.6	16.3
1949.....	37.0	7.4	29.6	6.0	3.4	2.6	13.2	4.0	9.2	17.8
1950.....	32.2	5.7	26.5	4.1	2.6	1.5	11.6	3.1	8.5	16.5
1951.....	38.0	7.4	30.6	4.9	3.0	2.0	14.6	4.4	10.2	18.6
1952.....	37.2	7.7	29.5	5.0	3.3	1.7	13.3	4.4	8.9	18.9
1953.....	37.5	7.2	30.3	4.1	2.7	1.4	13.7	4.5	9.2	19.7
1954.....	36.7	7.2	29.5	5.0	3.5	1.5	11.8	3.7	8.1	19.9
1955.....	30.4	7.1	22.3	4.6	3.0	1.7	11.7	4.1	7.7	20.0
1956.....	37.4	7.6	29.8	4.5	3.1	1.5	12.1	4.5	7.7	20.7
1957 ³	37.7	7.8	29.9	4.9	3.2	1.7	12.4	4.5	7.8	20.5
1958 ³	33.6	7.1	26.5	4.5	3.0	1.5	11.0	4.1	6.9	18.1
	33.0	6.9	26.1	4.4	2.9	1.5	10.8	4.0	6.8	17.8

¹ Data may not add to total because of rounding.² Practically all softwoods.³ Preliminary. Subject to revision.

Source: Bureau of the Census, U. S. Department of Commerce (24); Forest Service, U. S. Department of Agriculture.

Note. Estimates for 1957 and 1958 are based on data published by the National Lumber Manufacturers Association (9, 10).

TABLE 6.--Wholesale price indexes for lumber, all commodities and selected construction materials 1951-58
(1947-49 = 100)

Year and Month	Lumber	Structural steel	Paper-board	Structural clay products	Construction materials	All commodities	Plywood
1951.....	123.6	128.4	131.8	121.4	119.6	114.8	115.1
January.....	125.6	128.4	132.0	131.3	120.2	115.0	117.4
February.....	126.4	128.4	132.0	121.4	120.7	116.5	117.7
March.....	126.7	128.4	132.0	121.4	120.8	116.5	117.7
April.....	126.7	128.4	132.0	121.4	120.9	116.3	117.7
May.....	126.0	128.4	132.0	121.4	120.7	115.9	117.7
June.....	124.2	128.4	132.0	121.4	120.0	115.1	117.7
July.....	123.0	128.4	132.0	121.4	119.4	114.2	116.9
August.....	121.7	128.4	132.0	121.4	118.9	113.7	116.9
September.....	120.9	128.4	132.0	121.4	118.7	113.4	114.8
October.....	121.1	128.4	131.7	121.4	118.7	113.7	114.3
November.....	120.8	128.4	131.5	121.4	118.5	113.6	109.4
December.....	120.4	128.4	130.9	121.4	118.0	113.5	102.8
1952.....	120.5	131.1	127.4	122.0	118.2	111.6	105.0
January.....	120.4	128.4	130.6	121.4	117.8	113.0	104.2
February.....	120.6	128.4	130.3	121.4	117.9	112.5	104.8
March.....	120.7	128.4	130.3	121.4	118.0	112.3	105.6
April.....	121.3	128.4	130.3	121.3	118.2	111.8	105.6
May.....	121.1	128.4	129.8	121.4	118.1	111.6	105.6
June.....	120.1	128.4	129.3	121.4	117.8	111.2	105.7
July.....	120.4	128.4	125.4	121.3	118.0	111.8	105.8
August.....	120.6	134.9	124.6	121.3	118.6	112.2	106.0
September.....	120.6	134.9	124.6	121.3	118.7	111.8	106.0
October.....	120.2	134.9	124.6	124.0	118.6	111.1	106.1
November.....	120.0	134.9	124.8	124.0	118.4	110.7	102.3
December.....	119.8	134.9	124.4	124.0	118.3	109.6	102.3
1953.....	119.3	138.2	124.3	128.1	119.9	110.1	109.3
January.....	120.1	134.9	124.2	124.0	118.5	109.9	108.5
February.....	120.3	134.9	123.5	124.0	118.7	109.6	110.9
March.....	120.9	134.9	123.4	124.3	119.2	110.0	112.0
April.....	121.5	134.9	123.1	124.6	119.9	109.4	112.0
May.....	121.0	133.8	123.1	124.7	120.2	109.8	112.4
June.....	120.7	133.8	123.2	125.1	120.5	109.5	112.4
July.....	120.2	141.9	123.7	131.1	121.3	110.9	112.7
August.....	119.3	141.9	123.6	131.4	120.8	110.6	112.4
September.....	118.3	141.9	126.0	132.0	120.4	111.0	106.8
October.....	117.2	141.9	126.2	132.0	120.0	110.2	104.7
November.....	116.3	141.9	126.0	132.1	119.5	109.8	103.1
December.....	116.4	141.9	125.9	132.1	119.6	110.1	103.9
1954.....	117.3	143.8	124.5	133.1	120.2	110.3	103.1
January.....	115.9	141.9	125.5	131.9	119.6	110.9	103.5
February.....	115.5	141.3	125.1	131.9	119.2	110.5	105.0
March.....	115.6	141.3	124.6	132.0	119.3	110.5	102.9
April.....	115.3	141.3	124.8	132.0	119.0	111.0	100.7
May.....	115.0	141.3	124.4	132.0	118.6	110.9	101.4
June.....	115.5	141.3	124.2	132.0	118.5	110.0	99.7
July.....	118.6	146.2	124.2	132.0	120.5	110.4	103.0
August.....	118.7	146.2	124.2	132.3	120.8	110.5	105.4
September.....	119.0	146.2	124.2	135.4	121.3	110.0	103.2
October.....	119.5	146.2	124.2	135.4	121.7	109.7	104.3
November.....	119.6	146.2	124.1	135.4	121.9	110.0	104.3
December.....	119.8	146.2	124.1	135.4	122.0	109.5	104.3
1955.....	124.4	151.9	127.1	140.1	125.5	110.7	105.4
January.....	120.0	146.2	124.0	135.8	122.1	110.1	104.7
February.....	121.4	146.2	124.0	136.1	122.5	110.4	104.8
March.....	121.8	146.2	125.7	136.5	122.8	110.0	104.8
April.....	122.9	146.2	126.0	136.8	123.4	110.5	104.8
May.....	124.2	146.2	126.0	137.0	124.1	109.9	105.6
June.....	124.7	146.2	126.0	137.3	124.1	110.3	105.6
July.....	125.1	157.5	126.1	141.3	125.7	110.5	105.7
August.....	126.4	157.5	128.0	142.9	127.4	110.9	105.7
September.....	127.1	157.5	129.5	143.9	128.5	111.7	106.1
October.....	126.8	157.5	129.7	144.3	128.7	111.6	106.1
November.....	126.4	157.5	130.1	144.5	128.1	111.2	105.9
December.....	126.4	157.5	130.3	144.6	128.3	111.3	105.7

TABLE 6.--Wholesale price indexes for lumber, all commodities and selected construction materials
1951-1958--Continued

Year and Month	Lumber	Structural steel	Paper-board	Structural clay products	Construction materials	All commodities	Plywood
1956.....	127.2	162.9	134.8	148.0	130.6	114.3	101.7
January.....	127.6	157.5	130.7	145.3	129.4	111.9	107.5
February.....	128.2	157.5	130.7	145.6	129.6	112.4	107.5
March.....	129.9	157.5	130.6	145.9	130.5	112.8	107.5
April.....	130.6	157.5	134.5	146.0	131.2	113.6	106.9
May.....	130.4	157.5	136.4	146.1	130.8	114.4	102.7
June.....	129.6	157.5	136.5	146.5	130.6	114.2	101.0
July.....	128.5	157.5	136.5	149.3	130.6	114.0	103.3
August.....	127.1	170.5	136.4	150.1	131.5	114.7	99.2
September.....	125.2	170.5	136.3	150.1	131.0	115.5	99.2
October.....	123.6	170.5	136.3	150.1	131.0	115.6	96.1
November.....	123.1	170.5	136.2	150.3	130.8	115.9	94.8
December.....	122.4	170.5	136.2	150.4	130.5	116.3	94.6
1957.....	119.7	187.5	136.3	154.0	130.6	117.6	96.4
January.....	122.6	179.1	136.2	150.6	130.5	116.9	97.1
February.....	121.9	183.4	136.2	150.7	130.5	117.0	96.4
March.....	121.2	183.4	136.2	150.8	130.5	116.9	96.2
April.....	121.2	183.4	136.2	155.0	130.7	117.2	96.7
May.....	120.6	183.4	136.2	155.0	130.7	117.1	96.8
June.....	120.4	183.4	136.2	155.1	130.7	117.4	97.7
July.....	120.0	192.3	136.2	155.1	131.4	118.2	96.9
August.....	119.4	192.3	136.2	155.0	131.2	118.4	95.2
September.....	118.3	192.3	136.2	155.0	130.9	118.0	94.7
October.....	117.5	192.3	136.6	155.1	130.2	117.8	96.9
November.....	117.1	192.3	136.6	155.1	130.1	118.1	96.4
December.....	116.4	193.3	136.6	155.1	130.1	118.5	95.6
1958.....							
January.....	116.5	192.3	136.4	155.3	130.3	118.8	95.6
February.....	116.3	192.3	136.4	155.3	130.1	119.0	93.7
March.....	115.9	192.3	136.2	155.5	129.4	119.7	92.9
April.....	115.9	192.3	136.1	155.5	129.0	119.3	94.4
May.....	116.7	192.3	136.0	155.6	129.2	119.5	92.2
June.....	116.8	192.3	136.0	155.6	129.5	119.2	94.9
July.....	116.7	192.3	136.0	155.6	129.6	119.2	98.3
August ¹	118.7	199.6	136.0	155.6	130.6	119.1	99.4

¹ Preliminary

Source: Bureau of Labor Statistics, U. S. Department of Labor (29).

TABLE 7.—Estimated pulpwood production in the United States, by regions and by hardwoods and softwoods, selected years 1899-1958¹

Year	All regions			North			South			West, ² total ²
	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	
Million cords	Million cords	Million cords	Million cords	Million cords	Million cords	Million cords	Million cords	Million cords	Million cords	Million cords
1899.....	1.6	0.5	1.2	1.4	0.5	0.9	1.0	—	—	0.2
1905.....	2.5	.4	2.1	2.5	.4	2.1	0.1	—	—	—
1910.....	3.1	.8	2.3	2.8	.7	2.1	0.3	—	—	.1
1916.....	4.4	.7	3.7	4.2	.6	3.6	.2	—	—	—
1920.....	5.0	.8	4.3	4.5	.5	4.0	.4	.3	.1	.2
1925.....	5.0	.7	4.3	4.1	.4	3.7	.6	—	—	.3
1930.....	6.1	.8	5.3	3.9	.4	3.5	1.0	.4	.5	1.2
1935.....	6.6	.9	5.7	2.9	.3	2.6	1.4	.6	.9	2.2
1941.....	14.2	1.8	12.3	4.4	1.1	3.3	7.2	.7	6.4	2.6
1942.....	14.9	1.9	13.0	5.0	1.2	3.8	7.3	.7	6.6	2.6
1943.....	13.6	1.8	11.8	4.0	1.1	2.9	7.1	.7	6.5	2.5
1944.....	15.3	2.0	13.4	4.6	1.0	3.5	8.2	1.0	7.2	2.6
1945.....	15.3	2.2	13.1	4.7	1.1	3.6	8.1	1.1	7.0	2.5
1946.....	17.0	2.6	14.4	5.6	1.4	4.2	8.8	1.2	7.6	2.6
1947.....	18.5	2.5	16.0	5.6	1.3	4.3	9.3	1.2	8.1	3.6
1948.....	20.0	2.5	17.5	5.4	1.2	4.2	11.4	1.3	10.1	3.3
1949.....	17.6	2.3	15.3	4.6	1.3	3.3	9.9	1.0	8.9	3.1
1950.....	20.7	2.9	17.8	5.0	1.7	3.3	12.4	1.2	11.2	3.3
1951.....	25.1	3.8	21.3	6.3	2.2	4.1	14.1	1.6	12.5	4.7
1952.....	25.1	3.7	21.4	6.0	1.9	4.1	14.6	1.8	12.8	4.5
1953.....	26.3	4.2	22.1	5.4	2.2	3.2	16.2	2.0	14.2	4.7
1954.....	27.0	4.8	22.2	5.5	2.6	2.9	16.4	2.2	14.2	5.1
1955.....	30.9	5.3	25.6	6.3	2.7	3.6	18.4	2.6	15.8	6.2
1956.....	35.2	6.1	29.1	7.3	3.2	4.1	20.3	2.9	17.4	7.6
1957.....	34.4	6.2	28.2	7.2	3.2	4.0	19.8	3.0	16.8	7.4
1958 ³	33.5	6.0	27.5	7.1	3.2	3.9	19.2	2.8	16.4	7.2

¹ Data may not add to totals because of rounding.² Practically all softwoods.³ Preliminary. Subject to revision.

Source: Bureau of the Census, U. S. Department of Commerce (25); Forest Service, U. S. Department of Agriculture (20).

TABLE 8.--Pulpwood prices at local delivery points, 1933-58
(Dollars per standard cord, including bark)

Year	Southern pine ¹	Lake States spruce ²
1933.....	..	7.75
1934.....	..	7.25
1935.....	..	7.75
1936.....	..	7.50
1937.....	..	9.75
1938.....	3.60	8.50
1939.....	3.90	9.00
1940.....	4.20	9.00
1941.....	4.60	10.50
1942.....	6.00	12.25
1943.....	7.20	14.75
1944.....	8.20	15.00
1945.....	8.40	15.00
1946.....	10.10	16.50
1947.....	11.00	23.75
1948.....	11.70	22.25
1949.....	11.00	18.50
1950.....	11.90	19.50
1951.....	13.80	22.50
1952.....	13.90	26.50
1953.....	13.90	24.75
1954.....	14.00	24.75
1955.....	14.40	24.75
1956.....	15.40	26.75
1957.....	15.50	27.25
1958.....	15.90	27.25

¹ Source: Forest Service, U. S. Department of Agriculture.

² Source: University of Wisconsin Extension Forestry Office (33).

TABLE 9.--Production¹ of veneer logs and bolts in the United States, selected years, 1905-1958
(Million board-feet, log scale)

Year	All species	Softwood	Hardwood
1905.....	181	13	168
1906.....	329	52	277
1907.....	349	39	310
1908.....	383	51	332
1909.....	436	56	380
1910.....	477	49	428
1911.....	445	51	394
1919.....	577	93	484
1921.....	400	70	330
1923.....	646	151	495
1925.....	735	194	541
1927.....	962	290	672
1929.....	1,113	394	719
1931.....	696	228	468
1933.....	700	282	418
1935.....	824	340	484
1937.....	1,114	460	654
1939.....	1,194	544	650
1942.....	1,736	797	939
1943.....	1,594	659	935
1944.....	1,533	647	886
1945.....	1,404	546	858
1947.....	1,570	751	819
1951.....	2,271	1,232	1,039
1952.....	2,467	1,548	919
1953.....	2,815	1,861	954
1954.....	2,894	1,978	916
1955.....	3,433	2,431	1,002
1956.....	² 3,444	2,493	2 951
1957.....	² 3,307	2,455	2 852
1958.....	² 3,475	2,575	2 900

¹ Includes small volumes of imported logs.

² Preliminary, subject to revision.

Source: U. S. Department of Commerce, Bureau of the Census (22, 23); U. S. Department of Agriculture, Forest Service.

TABLE 10.--Supplies, requirements, and prices, rosin and turpentine by types, selected crop years beginning April 1, 1949 through 1958
(520-lb. drums)

Crop year beginning April 1	Commodity and type	Supply				Requirements			Carry-cut stocks ¹	Average price per 100# net ⁶
		Carry-in stocks ¹	Production	Imports	Total supply	Domestic	Export	Total		
ROSIN (520 lb. Drums)										
1949.....	Gum.....	477,570	924,900	4,229	1,406,699	347,152	256,927	604,079	802,620	6.47
	S. D. wood.....	140,660	1,098,610	-0-	1,239,270	842,512	305,098	1,147,610	91,660	
	Tall oil (est.).....	-0-	4,000	-0-	4,000	-0-	-0-	-0-	4,000	
	Total.....	618,230	2,027,510	4,229	2,649,969	1,189,664	562,025	1,751,689	898,280	
1950.....	Gum.....	802,620	797,620	4,475	1,604,715	550,584	595,591	1,146,175	458,540	6.31
	S. D. wood.....	91,660	1,339,410	-0-	1,431,070	985,348	345,682	1,331,030	100,040	
	Tall oil (est.).....	4,000	35,000	-0-	39,000	37,000	(4)	37,000	2,000	
	Total.....	898,280	2,172,030	4,475	3,074,785	1,572,932	941,273	2,514,205	560,580	
1951.....	Gum.....	458,540	716,350	1,980	1,176,870	392,190	293,140	685,330	491,540	8.73
	S. D. wood.....	100,040	1,333,040	-0-	1,433,080	923,479	278,561	1,202,040	231,040	
	Tall oil (est.).....	2,000	35,000	-0-	37,000	30,000	(4)	30,000	7,000	
	Total.....	560,580	2,084,390	1,980	2,646,950	1,345,669	571,701	1,917,370	729,580	
1952.....	Gum.....	491,540	638,360	3,000	1,132,900	312,563	138,577	451,140	681,760	7.53
	S. D. wood.....	231,040	1,082,530	-0-	1,313,570	917,178	218,062	1,135,240	178,330	
	Tall oil (est.).....	7,000	30,000	-0-	37,000	31,000	(4)	31,000	6,000	
	Total.....	729,580	1,750,890	3,000	2,483,470	1,260,741	356,639	1,617,380	866,090	
1953.....	Gum.....	681,760	531,620	1,410	1,214,790	348,050	132,100	480,150	734,640	7.72
	S. D. wood.....	178,330	1,213,340	-0-	1,391,670	913,880	384,350	1,298,230	93,440	
	Tall oil (est.).....	6,000	35,000	-0-	41,000	37,000	(4)	37,000	4,000	
	Total.....	866,090	1,779,960	1,410	2,647,460	1,298,930	516,450	1,815,380	832,080	
1954.....	Gum.....	734,640	527,700	390	1,262,730	345,220	208,840	554,060	708,670	7.91
	S. D. wood.....	93,440	1,342,370	-0-	1,435,810	887,420	458,470	1,345,890	89,920	
	Tall oil (est.).....	4,000	50,000	-0-	54,000	49,000	(4)	49,000	5,000	
	Total.....	832,080	1,920,070	390	2,752,540	1,281,640	667,310	1,948,950	803,590	
1955.....	Gum.....	708,670	452,970	650	1,162,290	406,689	151,091	557,780	604,510	8.45
	S. D. wood.....	89,920	1,369,440	-0-	1,459,360	945,892	400,598	1,346,490	112,870	
	Tall oil (est.).....	5,000	125,000	-0-	130,000	115,000	(4)	115,000	15,000	
	Total.....	803,590	1,947,410	650	2,751,650	1,467,581	551,689	2,019,270	732,380	
1956.....	Gum.....	604,510	444,590	650	1,049,750	347,450	136,050	483,500	566,250	8.37
	S. D. wood.....	112,870	1,324,220	-0-	1,437,090	875,260	467,960	1,343,220	93,870	
	Tall oil (est.).....	15,000	225,000	-0-	240,000	210,000	(4)	210,000	30,000	
	Total.....	732,380	1,993,810	650	2,726,840	1,432,710	604,010	2,036,720	690,120	
1957.....	Gum.....	566,250	399,910	270	966,430	283,510	123,470	406,980	559,450	7.90
	S. D. wood.....	93,870	1,195,990	-0-	1,289,860	798,230	420,890	1,219,120	70,740	
	Tall oil (est.).....	30,000	269,270	-0-	299,270	259,210	(4)	259,210	40,060	
	Total.....	690,120	1,865,170	270	2,555,560	1,340,950	544,360	1,885,310	670,250	
1958 (est.)	Gum.....	559,000	370,000	1,000	930,000	280,000	100,000	380,000	550,000	8.20
	S. D. wood.....	71,000	1,175,000	-0-	1,246,000	821,000	355,000	1,176,000	70,000	
	Tall oil.....	40,000	285,000	-0-	325,000	235,000	50,000	285,000	40,000	
	Total.....	670,000	1,830,000	1,000	2,501,000	1,336,000	505,000	1,841,000	660,000	
TURPENTINE (50 gallon barrels)										
1949.....	Gum.....	127,130	323,010	14,170	464,310	240,380	99,270	339,650	124,660	.384
	Wood (total).....	102,560	350,280	-0-	452,840	315,256	56,284	371,540	81,300	
	S. D.	(2)	199,630	-0-	(2)	(2)	(2)	(2)	(2)	
	Sulphate.....	(2)	147,500	-0-	(2)	(2)	(2)	(2)	(2)	
1950.....	D. D.	(2)	3,150	-0-	(2)	(2)	(2)	(2)	(2)	
	Total.....	229,690	673,290	14,170	917,150	555,636	155,554	711,190	205,960	
	Gum.....	124,660	271,880	16,771	413,311	239,940	137,771	377,711	35,600	.551
	Wood (total).....	81,300	436,670	-0-	517,970	354,117	(2)	424,810	93,160	
1951.....	S. D.	(2)	237,080	-0-	(2)	(2)	(2)	(2)	(2)	
	Sulphate.....	(2)	194,180	-0-	(2)	(2)	(2)	(2)	(2)	
	D. D.	(2)	5,410	-0-	(2)	(2)	(2)	(2)	(2)	
	Total.....	205,960	708,550	16,771	931,281	594,057	208,464	802,521	128,760	
1952.....	Gum.....	35,600	246,460	19,092	301,152	174,571	67,251	241,822	59,330	.763
	Wood (total).....	93,160	437,500	-0-	530,660	352,286	43,254	395,540	135,120	
	S. D.	(2)	229,590	-0-	(2)	(2)	(2)	(2)	(2)	
	Sulphate.....	(2)	203,430	-0-	(2)	(2)	(2)	(2)	(2)	
1953.....	D. D.	(2)	4,480	-0-	(2)	(2)	(2)	(2)	(2)	
	Total.....	128,760	683,960	19,092	831,812	526,857	110,505	637,362	194,450	
	Gum.....	59,330	217,360	19,636	296,326	173,084	43,042	216,126	80,200	.534
	Wood (total).....	135,120	347,580	-0-	482,700	294,635	39,115	333,750	148,950	
1954.....	S. D.	(2)	175,090	-0-	(2)	(2)	(2)	(2)	(2)	
	Sulphate.....	(2)	169,560	-0-	(2)	(2)	(2)	(2)	(2)	
	D. D.	(2)	2,930	-0-	(2)	(2)	(2)	(2)	(2)	
	Total.....	194,450	564,940	19,636	779,026	467,719	82,157	549,876	229,150	

See footnotes at end of table.

TABLE 10.--Supplies, requirements, and prices, rosin and turpentine by types, selected crop years beginning April 1, 1949 through 1958--Continued

Crop year beginning April 1	Commodity and type	Supply				Requirements			Carry-out stocks ¹	Average price per 100# net ⁶
		Carry-in stocks ¹	Production	Imports	Total supply	Domestic	Export	Total		
TURPENTINE (50 gallon barrels)--Continued										
1953.....	Gum.....	80,200	177,680	22,830	280,710	156,500	34,880	191,380	89,330	.516
	Wood (total).....	148,950	360,170	-0-	509,120	348,470	53,070	401,540	107,580	--
	S. D.....	(2)	193,090	-0-	(2)	(2)	(2)	(2)	(2)	--
	Sulphate.....	(2)	164,220	-0-	(2)	(2)	(2)	(2)	(2)	--
	D. D.....	(2)	2,860	-0-	(2)	(2)	(2)	(2)	(2)	--
	Total.....	229,150	537,850	22,830	789,830	504,970	87,950	592,920	196,910	--
1954.....	Gum.....	89,330	175,940	15,360	280,630	145,950	50,240	196,190	84,440	.519
	Wood (total).....	107,580	441,860	-0-	549,440	392,150	65,620	497,770	91,670	--
	S. D.....	(2)	207,700	-0-	(2)	(2)	(2)	(2)	(2)	--
	Sulphate.....	(2)	231,750	-0-	(2)	(2)	(2)	(2)	(2)	--
	D. D.....	(2)	2,410	-0-	(2)	(2)	(2)	(2)	(2)	--
	Total.....	196,910	617,800	15,360	830,070	538,100	115,860	653,960	176,110	--
1955.....	Gum.....	84,440	149,000	18,441	251,881	133,866	45,845	179,711	72,170	.556
	Wood (total).....	91,670	506,540	-0-	598,210	442,581	56,119	498,700	99,510	--
	S. D.....	(2)	201,270	-0-	(2)	(2)	(2)	(2)	(2)	--
	Sulphate.....	(2)	302,970	-0-	(2)	(2)	(2)	(2)	(2)	--
	D. D.....	(2)	2,300	-0-	(2)	(2)	(2)	(2)	(2)	--
	Total.....	176,110	655,540	18,441	850,091	576,447	101,964	678,411	171,680	--
1956.....	Gum.....	72,170	143,830	23,270	239,270	129,440	64,700	194,140	45,130	.555
	Wood (total).....	99,510	501,100	-0-	600,610	430,680	60,450	491,130	109,480	--
	S. D.....	(2)	194,750	-0-	(2)	(2)	(2)	(2)	(2)	--
	Sulphate.....	(2)	305,310	-0-	(2)	(2)	(2)	(2)	(2)	--
	D. D.....	(2)	1,040	-0-	(2)	(2)	(2)	(2)	(2)	--
	Total.....	171,680	644,930	23,270	839,880	560,120	125,150	685,270	154,610	--
1957.....	Gum.....	45,130	129,080	14,564	188,774	113,724	32,170	145,894	42,880	.543
	Wood (total).....	109,480	497,740	-0-	607,220	451,710	47,290	499,000	108,220	--
	S. D. ⁴	(2)	185,980	-0-	(2)	(2)	(2)	(2)	(2)	--
	Sulphate.....	(2)	311,760	-0-	(2)	(2)	(2)	(2)	(2)	--
	Total.....	154,610	626,820	14,564	795,994	565,434	79,460	644,894	151,100	--
1958.....	Gum.....	43,000	121,000	18,000	⁵ 182,000	113,000	25,000	138,000	44,000	.515
	Wood (total).....	108,000	496,000	-0-	604,000	447,000	50,000	497,000	107,000	--
	S. D. ⁴	83,000	184,000	-0-	267,000	165,000	25,000	190,000	77,000	--
	Sulphate.....	25,000	312,000	-0-	337,000	282,000	25,000	307,000	30,000	--
	Total.....	151,000	617,000	18,000	786,000	560,000	75,000	635,000	151,000	--

¹ Includes CCC loan stocks. These are gross stocks and include rosin and turpentine sold and awaiting shipment.² No breakdown practicable from existing information.³ Estimated.⁴ Prior to 1958, exports of tall oil rosin were combined with steam distilled wood rosin exports as reported by the Bureau of the Census. Consequently, the estimated domestic consumption of tall oil rosin necessarily included steam distilled wood rosin to the extent of such tall oil rosin exports.⁵ Includes all types of rosin and turpentine.⁶ Rosin in drums f.o.b. production points; turpentine bulk at production points.⁷ Includes destructively distilled turpentine.

Source: Reports of Agricultural Marketing Service, USDA, and Bureau of the Census, Department of Commerce; records of Commodity Stabilization Service, USDA.



UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

DEVELOPING THE GENERAL OUTLOOK*

Carroll Downey

In these 20 minutes I will describe to you briefly, step by step, how the economic forecast of business conditions in the year ahead is prepared in the Agricultural Economics Division of the Agricultural Marketing Service. It is this forecast of the level of demand for all goods and services in the United States which serves as the basis upon which the commodity specialists in the Department of Agriculture develop the outlook for particular commodities, taking into account the supply situation for their commodities as well as the demand and supply picture for competing products. Martin Gerra, who follows next on the program this afternoon, will explain to you how this is done.

The preparation of the outlook for general economic activity in the following year is begun each year in late summer or early fall. For example, the 1959 outlook was begun last July. By then we have revised estimates of Federal spending up to the middle of the next year and shortly after, results are available of surveys inquiring into business plans for investment in the early part of 1959.

The method of approach is to work through the national income accounts, sector by sector. Most of you are probably familiar with this way of looking at total economic activity. The four major sources of demand for the output of the economy are the Government--Federal, State and local; business firms--who purchase machinery and build new plants and who sometimes add to their inventories but more recently have been liquidating them. Also included in this group are construction expenditures by individuals. Third is the demand for our output abroad--the foreign sector. Last is the largest sector, which usually consumes about 65 percent of the annual output of goods and services--private households. The expenditures of these four sectors together sums up to the gross national expenditure or output, usually called GNP. Our aim in building up the four sectors is to arrive at the total GNP.

Once we arrive at that, and, after allowing for prospective changes in prices and productivity, we can determine what employment is necessary to produce that output. Please note at this point that if prospective demands are substantially in excess of our resources that upward price pressures will

*A statement by Carroll Downey, U. S. Department of Agriculture at the 36th Annual Outlook Conference, Washington, D. C., November 18, 1958.

be generated. This level of employment, together with wage and salary rates, largely determines consumer income. It is our estimate of consumer income, which is most important to the agricultural economist who wishes to forecast the demand for farm products in the coming year. Income is the most important factor influencing the demand for all but a few commodities, both farm and non-farm.

Here is the method that is followed. We begin with the Government sector.. The Federal budget for the current fiscal year provides us with a basis for making estimates of Federal Government spending up until July 1 of next year. The Budget Bureau publishes in the early fall a review of the current fiscal year's budget based on congressional action. These are extended through the remainder of the year, relying on information we have about continuing Government programs and proposed changes in appropriations. We have less detailed knowledge about the future course of spending by State and municipal Governments. State and local bond issues help some. These expenditures have, in total, exhibited a pronounced upward trend in the past. We can push this trend one year into the future, modified by knowledge about particular programs, such as spending under the interstate highway program and for schools, without risk of serious error.

Estimation of demand by businessmen, the investment sector, is more difficult. Not only do changes in investment spending partly determine the total level of economic activity but the level of economic activity strongly influences investment. In estimating investment for the coming year we try to make allowance for this "feed back" effect. The forecast of spending by business firms on new plant and equipment rests on an examination of the amount of idle capacity in major industries, the recent trend in new orders and the backlog of unfulfilled orders of manufacturers. Surveys of investment plans of business corporations by the Department of Commerce and the Securities and Exchange Commission and by private organizations, are considered. The level of profits and the state of the money market are studied since these give some evidence of the ability of firms to finance new investment.

New private housing is included as part of business investment in the national income accounts. The factors which are most important in determining new housing construction are the rate of new family formation, family income, the number of new houses built in the recent past, building costs, vacancy rates, interest rates, and any changes in credit terms of FHA and VA loans. The number of new dwellings begun under conventional financing has remained pretty stable in recent years. Hence, swings in new home building are closely associated with changes in Government assisted financing. Since the interest rate on Government housing loans changes infrequently, any tightening in the money market has a marked influence on funds available for new homes assisted by Government financing and, thus, on construction activity.

Changes in inventories held by business firms are estimated largely on the basis of current levels of inventories in relation to sales. This ratio of stocks to sales--at the manufacturing, wholesale, and retail levels--is compared previous periods of high and low business activity.

Net foreign investment, the difference between exports and imports, accounts for only a small fraction of gross national product. The outlook for exports is determined by gold and dollar holdings of foreign countries, business conditions abroad, output in the rest of the world of commodities which compete with our export commodities and our export programs for farm products. Our imports are largely a function of the level of economic activity in this country.

The last component to be estimated is the most important--the consumer sector. Modern economic theory and empirical observation tell us that the level of consumer expenditures is largely determined by the level of consumer income. But other factors, such as the amount of installment debt which consumers have to pay off, liquid asset holdings, and radical changes in designs of new automobiles, also are influencing factors.

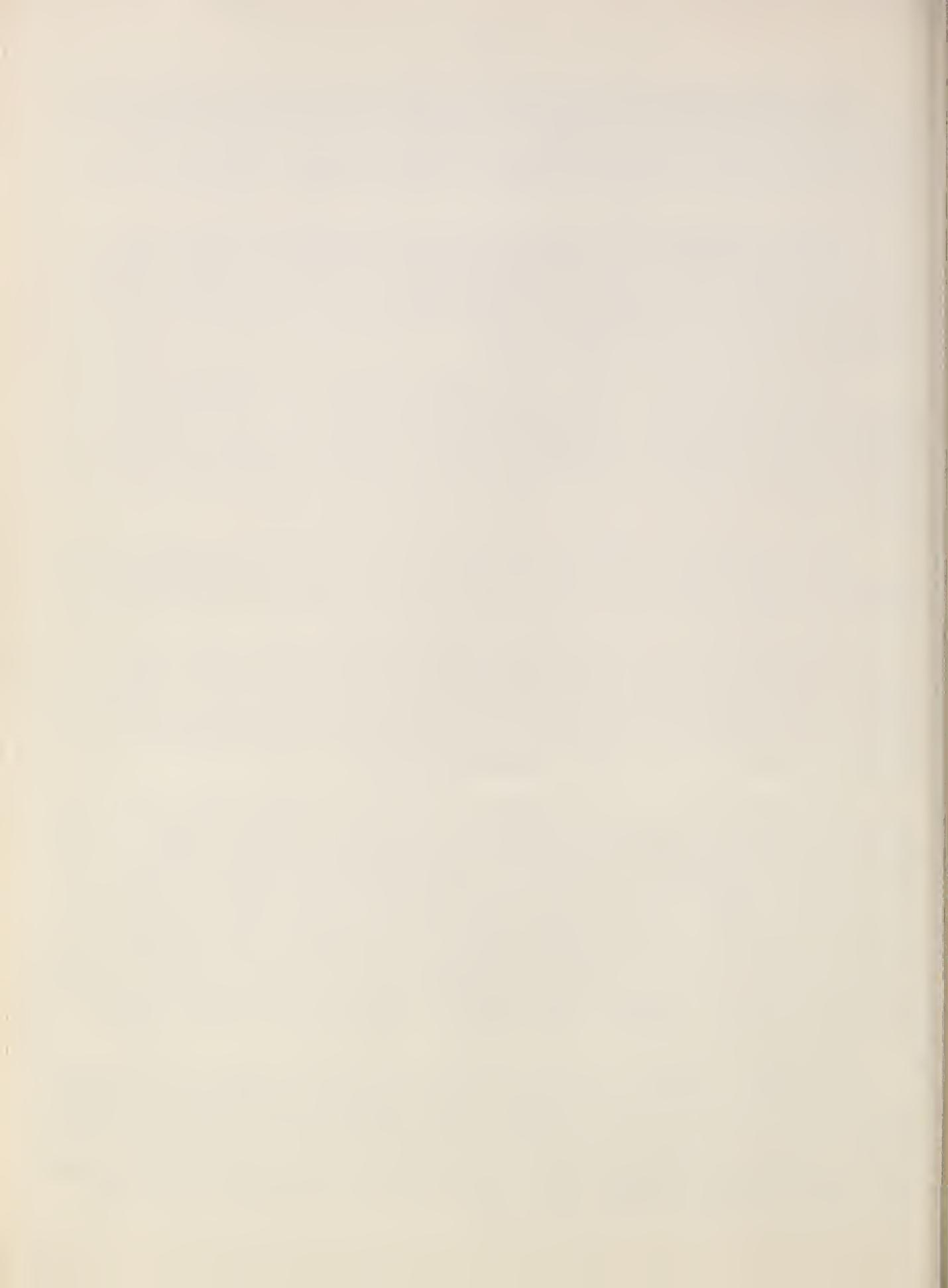
If we know what the level of income will be we can, by statistically determining what the average relationship between consumer income and expenditures has been in the past, estimate consumer expenditures in the year ahead. But the amount of income that consumers receive for producing goods and services is determined, together with any changes in taxes, by the level of the gross national product. As we have seen, this is the sum of the output of the four major sectors of the economy which includes consumer expenditures.

The solution is to estimate consumer income and expenditures simultaneously. We have already estimated Government expenditures, business investment and net foreign investment. So, when we obtain our estimate of consumer expenditures we have all the components of GNP as well. (Chart 2.)

In equation 2 in the chart, GNP less income and business taxes and undistributed profits of business firms is consumer income. In practice, these equations are estimated in terms of changes from year to year and not in absolute levels. So in equation 2, changes in consumer expenditures are estimated as determined by changes in consumer income. In that case, the coefficient "b" in equation 2 is what we know as the consumption function.

After our estimates of the national income accounts are completed they are checked for internal consistency. Estimates of individual components such as home construction, for example, are discussed with experts in particular fields in other agencies and sometimes modified. I have described in essence the steps involved in developing the general economic outlook for the Outlook Conference. The estimates of GNP, consumer income and spending, investment and net foreign demand are forwarded to the commodity analysts in the Agricultural Economics Division of AMS. After each specialist analyzes the outlook for his commodities, as will be described to you by Martin Gerra, he returns to the Farm Income Branch, estimates of prices received by farmers for his commodities in the year ahead. These price estimates, together with estimates of marketings and farm expenses form the basis for the outlook for farm income. (Chart 3.)

At present, research is being done which we hope will improve our estimates of prices received by farmers. Attempts have been made to statistically estimate farm prices on the basis of the consumer income estimate derived from the model I showed in Chart 2, together with appropriate supply factors. Some fairly good results have been achieved by analyzing separately the price-supported crops, those with important foreign markets, other crops, and livestock products. This work will be pursued further in the coming years.



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UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Institute of Home Economics

FAMILY USE OF CREDIT

By Janis Moore, Family Economist

Any discussion of family financial management is incomplete without some mention of the use of consumer credit. As many of you may remember, we devoted one entire session at the Outlook Conference 2 years ago to this topic. We discussed the tremendous increase in recent years in the number of consumers using credit, and in the size of their debt. The sequel to that story, at least up to the present time, is that the general upward trend continued, though at a slower pace, until the beginning of this year. The amount of consumer credit outstanding was higher, month by month, in 1957 than in 1956, both in terms of total for the entire population and of average per capita debt.

The mild recession that started late last year reversed this trend temporarily. During a recession, people tend to be more cautious about taking on new debts and concentrate on paying off the old ones. Because this is true, the total personal debt of consumers at the end of September 1958 was just about the same as a year earlier. But since population had increased and the value of the dollar decreased, the per capita debt in dollars of constant purchasing power was lower this September than last. In fact, it was lower than in September 1956. Now that the economic outlook is brighter the trend has reversed again, and families are on their way to still larger debt obligations.

The author of an article in a recent periodical says that families have lost interest in budgeting, and blames this lack of interest largely on the widespread use of credit. "Where consumers once saved up hard cash for purchases," he states, "they now find that business men have taken over much of their budgeting. . . . In an age of easy credit more American families . . . are turning to the deduction, installment, charge and check system of living." 1/

You and I know that many families are still interested in budgeting because they ask us for help in working out their spending plans. But we also realize that many of these spending plans will have to make provision for payments on installment purchases and loans. The families we are most likely to find interested in financing purchases with installment credit, according to Federal Reserve Board surveys, are those in the middle and upper middle income groups; married couples with children under 18 years old; families in skilled and semiskilled and service occupations; those with more than 1 earner; suburban dwellers; and persons under 45.

1/ "Family Budgets" Time, August 29, 1955, p. 76.

Within the last year or so we have made two studies in which we obtained some information about credit and the families who use it. I am going to give you a brief preview of our findings, as an addition to what we have learned from other sources about how families manage finances.

Study of working wives

The first of these is the study of working wives Miss Holmes told you about yesterday. Those of you who heard her will remember that this included 365 families, half with gainfully employed wives, half with wives who were full-time homemakers. I will speak of these two groups as the employed and the nonemployed families, in reference to the work status of the wife, as Miss Holmes did yesterday. We asked these families about payments made on consumer debts and home mortgages in 1957 and about new debts assumed during the year. In this case we were interested in finding out whether the credit practices of families with employed wives differed from those with nonemployed wives.

Payments on debt.--A majority of both the families with employed wives and of those with nonemployed wives made payments on consumer debts in 1957. However, the proportion making payments and the average amount paid was larger for the employed. Eighty-four percent of the families with employed wives reported payments, ranging up to \$1,800 and averaging \$469. Seventy-four percent of the nonemployed reported payments ranging up to \$1,500 and averaging \$426. These figures exclude down payments and payments on home mortgages.

Among both employed and nonemployed groups, families with wives under 40 were more likely to be making debt payments than those older. In addition, the average amount paid by the younger ones paying debts was larger. A comparison of the debt payments of families with husbands at the same income levels shows that those with employed wives made considerably larger payments at each level except the highest (table 1). This may mean that wives of husbands with modest incomes either went to work to help payoff debts already accumulated, or were using their earnings to buy more things on the installment plan. The Federal Reserve Board also reported evidence of extensive indebtedness among families in which the wife was working or looking for work.

Table 1.--Average consumer debt payments (excluding house) made by families of employed and nonemployed wives in 1957, by husband's income; 4 small cities in Georgia

Husband's income (after tax)	Average payment on consumer debts	
	Families with employed wives	Families with nonemployed wives
	<u>Dollars</u>	<u>Dollars</u>
All.....	469	426
Under \$3,000.....	371	306
\$3,000-3,999.....	604	409
\$4,000-4,999.....	487	378
\$5,000 and over.....	413	619

Debts assumed.--New consumer debts were assumed in 1957 by 70 percent of the families with employed wives and 63 percent of the nonemployed. The employed group took on just slightly larger debts than the nonemployed, averaging \$612 compared to \$560. They bought more expensive cars, for one thing. About the same proportion of families in both groups went into debt for cars, but the employed who assumed debts averaged \$270 more than the nonemployed. More employed than nonemployed took on debts for other kinds of consumer goods, but the average amount of debt assumed was about \$300 for each group.

Mortgage debt.--So far we haven't mentioned debts on homes, which are of major importance in the financial plans of families. In the Georgia study home ownership was about the same in both groups of families--59 percent of those with employed wives and 55 percent in the nonemployed. A recent Federal Reserve Board study showed that older families are more likely to be owners than younger ones, and this was true for both Georgia groups. The employed group included relatively more young owners than the nonemployed, and more currently paying on mortgages (table 2). Perhaps this indicates that the desire to own a home is important in bringing or keeping young home-makers in the labor force.

Table 2.--Percent of families of employed and nonemployed wives owning and paying on homes in 1957, by age of wife; 4 small cities in Georgia

Age of wife	Families owning homes		Families paying on mortgages	
	Employed wives	Nonemployed wives	Employed wives	Nonemployed wives
	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
All.....	59	55	37	32
Under 30.....	49	36	43	23
30-39.....	59	65	38	46
40-54.....	67	67	32	29

One in 20 families in each group assumed a debt during the year for buying or making major improvements on a home. The average debt was about \$500 more for the employed than the nonemployed.

To summarize for both installment and mortgage debt: About a third of the families making any debt payments were paying on both kinds of debt. All together, 90 percent of the employed and 84 percent of the nonemployed families paid on one or the other, or both.

Kentucky study

The second study I want to mention very briefly was made in five South Central Kentucky counties. This is a Rural Development area, which as you know, means that it is an area of relatively low incomes. Data covering the year from September 1, 1956 to August 31, 1957 were collected from 345 families living in the open country.

In contrast to the large proportion of families paying or taking on personal debts in the Georgia study, only 29 percent of these rural families reported either payments or new debts during the year. This proportion was the same for families getting most or all their income from the farm and for those getting it mainly from off-farm work. Debt for real estate was excluded in this study.

Most of the Kentucky debtor families made small payments. Payments ranged up to about \$1,000 but averaged only \$151.

This sums up what we can add at this time to the description of families using consumer credit. We can probably expect the number of such families to increase rather than decrease. It is hard nowadays for consumers to resist all the credit schemes urged upon them by newspaper advertising, mail, TV, radio, and sales people. New credit devices come along all the time. "Revolving" or "budget" charge accounts, though not exactly new, are being offered by more and more retailers and adopted by more and more families. Even many small retailers, who could not maintain individual credit departments, now offer revolving credit to customers through a bank credit card plan.

We didn't ask specifically about revolving accounts in the Georgia study, but learned in the course of the interviews that many families were using them. I suspect that few of these families knew what rate of interest they were paying on these accounts, which usually amounts to from 1 to 1-1/2 percent per month on the unpaid balance, or an annual rate of about 12 to 18 percent. We learned that the families in general had no idea what charges they were paying for credit. Other studies have reported the same lack of understanding.

Families sometimes ask what proportion of their incomes they can safely use for making installment payments. About a third of the families we interviewed in Georgia, both employed and nonemployed, made payments

on their nonmortgage debts amounting to 10 percent or more of income after tax. A tenth of them made payments as high as 20 percent or more of their income (table 3). These findings were in fairly close agreement with those reported by the Federal Reserve Board in 1956. We don't know whether the families found these debt loads too much to manage.

Table 3.--Percent of income paid in 1957 on consumer debts (excluding house) by families of employed and nonemployed wives; 4 small cities in Georgia

Percent of family income (after tax)	Families paying specified proportions of income on consumer debts	
	Employed wives	Nonemployed wives
	Percent	Percent
None.....	16	26
Some but less than 10 percent.....	51	40
10-19 percent.....	22	24
20 percent and over.....	11	10

These data reemphasize the fact that credit is a resource that must be taken into account in making family spending plans. We may not be entirely in sympathy with the use of large amounts of credit, or using it for some things people buy "on time," but we must admit it can be a helpful tool. Perhaps the function of the budget counselor can be to help families decide when it is wise to use credit, to understand how much they pay for the privilege of using it, and to shop for credit on satisfactory terms.





UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Institute of Home Economics

JOB-RELATED EXPENDITURES OF WORKING WIVES

By Emma G. Holmes, Home Economist

Thirty percent of U. S. wives (husband present) are in the labor force, according to recent Census Bureau figures. This represents a considerable change since 1940, when only about 15 percent of wives were employed. The biggest increase has been among women in their 30's and 40's, old enough so that their children are likely to be in school or college, or out on their own. But there has been a tendency, too, for more mothers of young children to be gainfully employed.

The outlook is for increasing numbers of women in the labor force. It is anticipated that the rate of employment of women 35 to 44 years old particularly will rise. This conclusion is based on two trends that have been noted. The first is the tendency for women to complete their families earlier, even though they are having more children. The second is the trend toward increased years of schooling, which will mean more women with college training. Women who have been to college, census reports show, are more likely to be gainfully employed than those with fewer years of schooling.

The question of whether a wife should work or should heed the old teaching that "woman's place is in the home" has many angles. Books, feature articles, and research reports have been written about the social, psychological, and economic implications of the trend toward higher employment rates among wives. A question frequently raised is how much farther ahead the family will be financially if the wife takes a job than if she remains a full-time home-maker and devotes her energies to household production. As an employed woman she will have expenses she would not have as a housewife. How much of her earnings will these take? How much will other family expenses be increased? How much will she have left to add to the family purse? Answers to these questions will be helpful in fitting the wife's earnings into the family financial plan.

Last spring we interviewed 365 wives living in 4 small cities in Georgia to learn something about the job-related expenses of working wives and the possible contribution these women could make to the family income. The families we visited were selected from a representative sample that had been included in a consumer marketing study done by the Georgia Experiment Station.

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From this sample we took all the families that met the requirements we had set up. These were (1) that the family must include both husband and wife, and have been in existence during all of 1957; (2) the husband must have had full-time employment during 1957; (3) the household must have not more than 6 members; (4) the wife must be under 55 years of age; and (5) the wife must, during 1957 have been either employed for 1,000 or more hours--that is, at least half time--or not employed at all. (6) If employed, the wife must not have worked in a business owned by the family, in which her husband also worked. The latter rule was made to exclude women who might not be able to give income figures for the year. We imposed these restrictions to limit somewhat the number of variables affecting our results.

In all cases, the wife was the family member interviewed, though frequently the husband was present and participated. In approximately half of the 365 families the wife was employed in 1957, and in half she was not. For the sake of brevity I will call these two groups of families the employed and the nonemployed families, in reference to the work status of the wife.

Description of the families.--Ideally we would have liked to match up the two groups of wives with respect to such characteristics as age, education, number of children, and income. In practice, however, we found this impossible in so small a sample. The employed wives in the study tended to be older than the nonemployed. The employed group included more all-adult families, fewer with small children, and fewer with more than 1 child under 18. About 30 percent of the employed wives had children under 6, compared to 60 percent of the nonemployed. As for education, both groups were about the same. Approximately half of the wives in each group had less than high school education; about 1/8 had one or more years of college training.

Another way in which the two groups differed was in amount of income earned by the husbands. Families with employed wives were less well off than those of nonemployed wives with respect to disposable income from the husband's earnings plus whatever amounts came from interest, dividends, rents and boarders. About 70 percent of the husbands of employed wives had after-tax incomes under \$4,000, compared to 50 percent of the nonemployed. At the high end of the income scale, 10 percent of the employed wives had husbands with \$5,000 or more after taxes, compared to 28 percent of the nonemployed.

Employment of the wife.--Textile mills provided the largest single source of employment for the women. Forty-five percent of them were in mill or similar operative jobs, 25 percent were clerical and sales workers, 17 percent household and other service workers, and 12 percent had professional and managerial positions. Half of the employed wives worked full time in 1957--that is, 2,000 hours or more; the other half worked varying lengths of time between 1,000 and 2,000 hours. The younger wives, who frequently had small children, were less likely to be full-time workers than the older wives. Some of the textile workers had less than full-time work because the mills were not in full production toward the end of 1957.

Earnings of the employed wives in 1957 ranged from \$388 to \$5,006 before taxes and deductions. About 3/4 of the women earned less than \$3,000 and the average was \$2,200. Adding the wife's income to the husband's changed the income distribution of the employed group considerably. Wives' earnings reduced the proportion of families with less than \$3,000 after taxes from 40 percent to 11 percent of the employed group, and increased the proportion

with \$5,000 or more from 10 to 54 percent. The feeling of a need for more money than the husband's income provided was an important factor in the wives' decisions to work. More than four-fifths of the wives gave economic reasons when we asked them why they were employed.

How much could the wives contribute to income?--The main purpose of the study was to learn how much of her total income would be left for family use after expenses related to the wife's employment were taken out. This meant deducting for such things as income taxes, social security, transportation to and from work, and lunches at work. We also felt that a deduction should be made for additional paid help used by employed wives to make their house-keeping tasks lighter. In addition, we wondered what difference, if any, having an income of her own might make in the amount the wife spent for her own clothing and personal care. We obtained information about expenditures for paid help, clothing, and personal care from all the wives, so we could compare those of the employed with the nonemployed.

Paid help.--The expenditures for paid help that we took into consideration included those for household help, whether to care for children, do laundry, or for general housework; care for children outside the home; laundry work away from home; and help for sewing. More employed than nonemployed wives reported each of these types of help.

Nine out of 10 of the employed women compared to 7 out of 10 of the non-employed reported some expenditure for one or more of the kinds of help I have just named. Paid laundry work was mentioned by both groups more frequently than any other work--by 76 percent of the employed and 59 percent of the nonemployed. Half of the employed wives and 1/4 of the nonemployed wives hired general housework done, while only 31 percent of the employed and 18 percent of the nonemployed paid for sewing help.

Obviously practices of hiring help for child care would be related to family type. Among the families with children under 6, 92 percent of the employed and 29 percent of the nonemployed reported paid help for child care. Among those with children 6 to 17 years old but none younger, 36 percent of the employed but only 7 percent of the nonemployed had such expenditures. Paid help to care for the child in his own home was much more common than care outside the home. This usually meant that the wife got some help with general housework or laundry work, as well as with the children.

The average expenditure for paid help was \$256 for the employed, \$73 for the nonemployed wives. In the employed group, spending for help increased with the husband's income, and varied a great deal among families of different types. On the average, working wives with children under 6 years old paid \$403 for help, compared with \$248 for those with children 6 to 17 only, and \$143 for those with adults only at home. In the nonemployed group, expenditure for help increased as the husband's income rose, but the presence of children in the family seemed to affect it very little.

Clothing expenditures.--The clothing expenditures used in calculating the extra amount spent by the working wives included amounts for the main items in a woman's wardrobe except underclothing, nightwear, and such sportswear as shorts and slacks. They also included cost of materials bought to make the listed garments, and expense for care, such as cleaning and shoe repair.

Employed wives spent more, on the average, for both clothing and personal care than nonemployed wives did. For clothing the average was \$197 for the employed, \$113 for the nonemployed. Wives whose husbands were at similar income levels spent more for their clothing when they were earning their own money than when they were not. We do not know how much of the extra amount spent by the working wives was due to the demands of her job, how much to the fact that she had more to spend and perhaps felt more free to spend on herself than when she was using her husband's earnings. Employed wives reported expenditures averaging \$54 for personal care, nonemployed wives \$33.

Calculating the wife's net money income

Now we are ready to calculate the net amount these working wives might have to contribute to the cash available for use by their families. Our first step was to calculate the Federal and State income taxes on family income with and without the wife's earnings. We allowed for standard deductions, and assumed a joint return on the combined earnings of husband and wife. We felt that such estimates might be more accurate than those we would get from the families, since the interviews preceded the filing date for the 1957 tax returns. We included the difference between the two tax estimates in the expenses we considered directly related to the wife's job. These employment-related expenses also included payments for social security and other retirement plans; transportation to and from work; lunches and snacks at work; gifts, flowers and contributions for coworkers; clothing used exclusively for work, like uniforms and jeans; and a few other items.

Here is how the average figures for the entire group of employed wives look:

<u>Averages for 186 employed wives</u>	
Amount earned.....	\$2,200
Job-related expenses.....	614
Remainder.....	1,586
Extra expense for paid help.....	184
Extra expense for clothing and personal care	105
Net available for family use.....	1,297

"Extra" expense for paid help and "extra" for clothing and personal care, you remember, are the average amounts spent by employed wives minus those spent by the nonemployed for these items.

According to this calculation, 28 percent of the average amount earned by the 186 working wives went for expenses directly related to their jobs; 8 percent for the additional expense she had for hired help; and 5 percent for added expenses for clothing and personal care. The amount remaining is about 3/5 of the sum paid her by her employer for her work.

An over-all average for the entire group of employed wives obscures the fact that there may be large variations related to income, family composition, and other characteristics of the group. As I pointed out earlier, for example, the presence or absence of children in the home makes quite a difference in the working wife's expenditure for hired help. Average earnings, job-related expenses, and "extra" expenses for employed wives in the three types of families we recognized in this study varied as follows:

	Averages for 3 types of families--		
	With chil- dren 6-17 only	With chil- dren un- der 6	
All-adult			
Wife's earnings.....	\$2,229	\$2,249	\$2,099
Job-related expenses.....	675	589	576
Remainder.....	1,554	1,660	1,523
Extra for paid help.....	69	187	326
Extra for clothing and personal care.....	134	73	105
Net available for family use.....	1,351	1,400	1,092

Average earnings of the wives in first two family type groups were approximately the same, but they were a little lower for the group with small children, partly because these wives tended to work fewer hours. "Extra" expense for paid help increased from \$69 in the all-adult group, to \$326 for the wives with children under 6. Wives in the adult group made the largest extra expenditure for clothing and personal care. The net amount left after deductions and extra expenses was a little more than 3/5 of the average earnings of the wives in the groups made up of adults and of parents with children 6 to 17 years old, and a little more than half the earnings of the wives with small children to be cared for.

The size of the husband's income makes a difference too. We divided the families into three groups on the basis of the husband's income. The "job-related expense" item took an increasing amount as the husband's income rose, and also an increasing proportion of the wife's earnings. "Extra" for clothing increased with the husband's income too. The "extra" amount the employed wives spent for clothing as compared with nonemployed wives with husbands in the same income groups also increased as income rose. The "extra" spent for help by wives with low-income husbands was considerably less than that spent when the husbands had medium or high incomes. Net income from the wife's earnings amounted to about 2/3 of the total in the low-income group, decreased to a little more than half in the high income group.

I want to remind you at this point that an average doesn't necessarily represent or apply to any one family or situation. Within the group on which the average is based there would be many variations--incomes considerably

below or above, spending varying from considerably less to considerably more than the average. Also, the figures I am giving you represent the experience and practices of families meeting specific requirements and living in a specific locality, and would not be expected to be applicable to those in other situations.

Some of the additional expenses we have charged to the employed wife may have in them elements of gain for the family. The extra expense for the wife's clothing, for example, may mean a better-dressed wife and therefore an increase in personal satisfaction. The deduction for social security provides protection against certain hazards. The cost of meals at work is not all additional expense, for the wife's food at home would cost something and we have not taken this into account.

This is a preliminary report of material we are still in the process of analyzing. Among the data we haven't had time to look at yet is some information about family food buying and preparation practices. We asked about the use of prepared and partially prepared foods like canned, frozen, and baked foods, and mixes. We also asked about home food preservation, expenditures for school lunches, and meals eaten out other than those at work and school. So far we have examined only the data for school lunches.

It seemed likely that school lunches might represent another added expense for the working mother. Actually, however, approximately 9 out of 10 families with school children 6 to 17 years old in both the employed and nonemployed groups reported expenditures for lunches at school, and the average expenditures per child were about the same. Evidently lunch at school for at least part of the school year is an accepted thing for school-age children in these Georgia cities whether mother is working or not.

The Georgia study was an exploratory one. As you have seen, it touched on only a few of the problems related to the employment of wives. Some other questions people are already asking us are: What effect does the employment of the wife have on family expenditures for recreation? for furniture? for children's clothing? for education? We are interested, also, in information about the rural wives who work outside the home as well as those in cities. These are questions for further studies, and we hope to delve into them in the future.

Chart 1

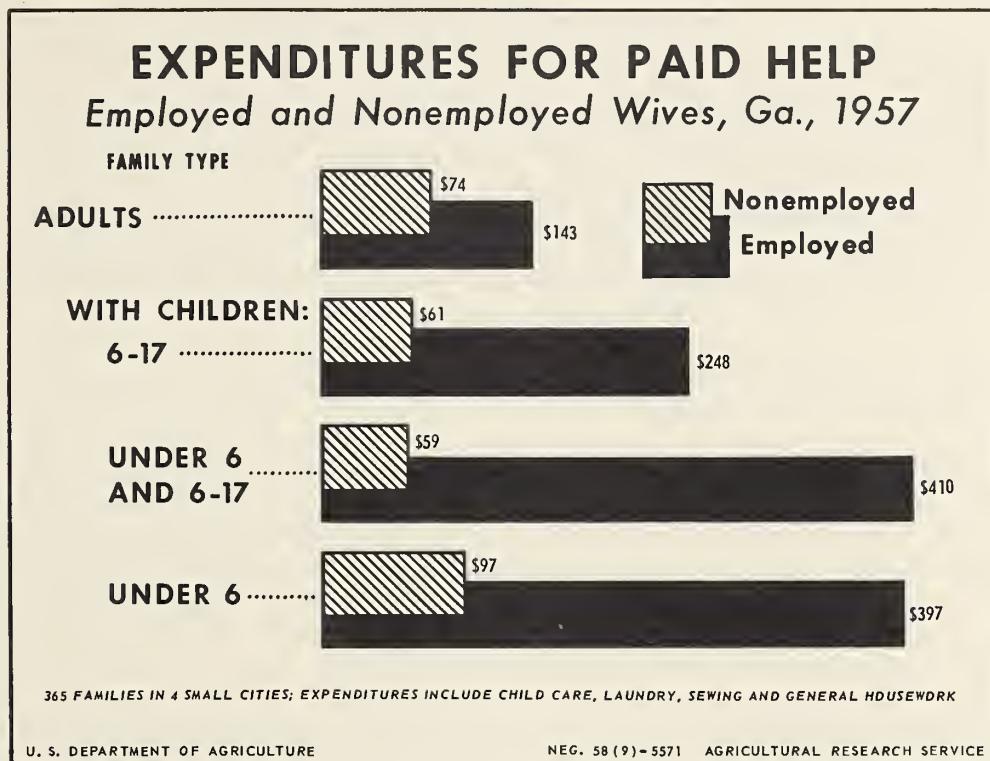
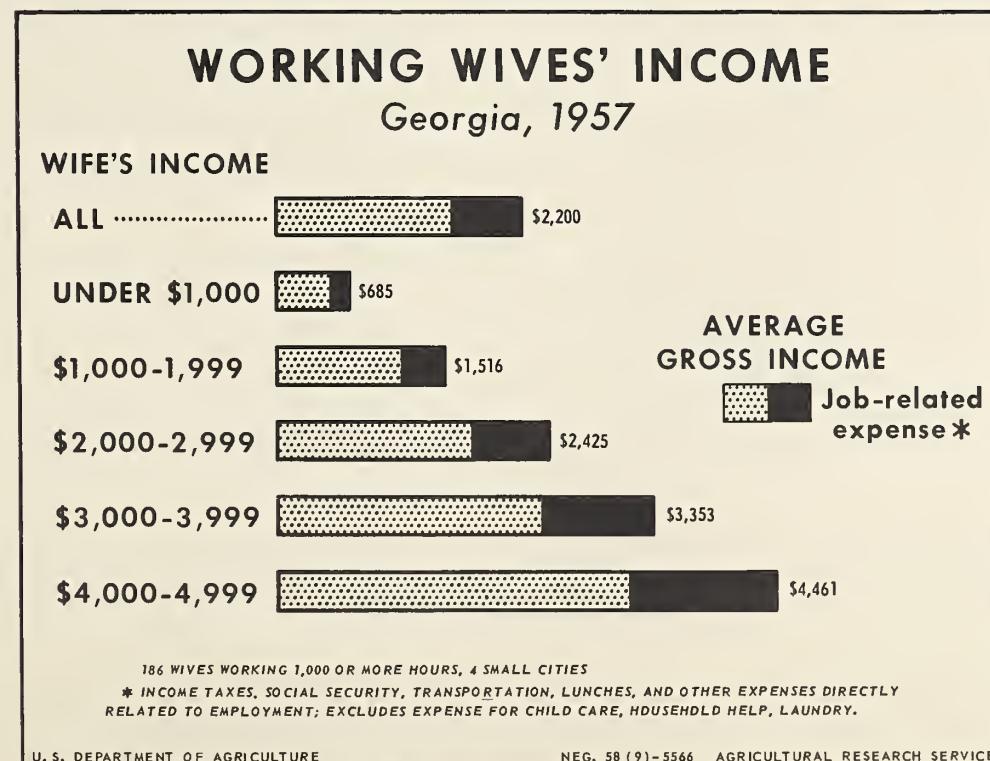


Chart 2



LEGUME AND GRASS SEED OUTLOOK*

1958 was a favorable year for seed production. Weather during the growing and harvesting periods was good over most of the country except for droughty areas in the Pacific Northwest and excessive moisture in sections of the Midwest. The drop in alfalfa seed production in California was due both to voluntary cutbacks and to heavy rains and winds. In some areas of the country, some seed was not harvested because growers felt that the harvesting operation would not be profitable if the increased supplies resulted in lower prices.

Current supplies of the 27 kinds of seed are sufficient to sow 82 million acres, assuming average rates of seeding in solid stands. If imports during 1958-59 approximate those of last year, the supplies available will be enough to seed 84 million acres. This would be 7 percent less than the 91 million acres that could have been seeded with last year's supply. However, domestic disappearance in 1957-58 was 30 percent smaller than total supply and seedings were made on only 63 million acres. It thus appears that over-all supplies for 1958-59 are more than ample for normal requirements.

Statistics indicate that the longtime upward trend in seed use is leveling off and that there has been a slight downward trend in use since 1952. While the trend in total supply continues upward there has also been some leveling off in recent years. However, the spread between total supply and domestic disappearance is still large.

The demand for seed in 1958-59 to meet the needs of Government programs will probably continue at about last year's level. There will be no Acreage Reserve Program in the Soil Bank for 1959. The Conservation Reserve will be increased which will raise requirements for seed.

While there are no data available on the demand for seed for nonagricultural seedings, certain past patterns can be observed and some conclusions drawn on future use for this purpose.

Current information on Federal Interstate Highway Programs and other State and local road construction indicates that consumption of seed for use on both new highway construction and normal roadside maintenance will remain near present levels. Though only a small part of total highway mileage, the divided highways built in recent years required large quantities of seed for landscaping. Even though experiments are underway to reduce the current heavy seeding rate employed in highway landscaping, the country's highways will require large quantities of seed in 1958-59.

The demand for lawn seeds will probably continue good since nonfarm residential construction in 1959 is expected to continue at about the 1958 level. In addition, increased quantities of these seeds will be required for lawn maintenance.

*Presented at the 36th Annual National Agricultural Outlook Conference, November 19, 1958, Washington 25, D. C. Prepared in the Agricultural Economics and Agricultural Estimates Divisions of AMS.

Supplies of Seed Compared with Last Year and Average

National Supply

Current total supply of 27 legume and grass seeds (1958 production plus carryover on June 30, 1958 and imports for July 1 to September 30, 1958) is estimated at 1,116 million pounds. This is 11 percent less than the supplies available in 1957-58 and 15 percent less than the five year average (1952-53 to 1956-57). If imports during the 9-month period, October 1958-June 30, 1959 approximate those of a year earlier, total supply will be close to 1,145 million pounds, or 9 percent below last year. Compared with 1957 crops, production of 21 of the 27 kinds of seed is lower this year, and at 782 million pounds, production in 1958 is 129 million less than in 1957 and 101 million less than the average. The drop in production this year was mostly in the grasses, winter cover crops, alfalfa and sweetclover. It was offset to some extent by a larger carryover of some important kinds.

Total supply of alfalfa, lespedeza and clover seed (excluding crimson clover) estimated at 571 million pounds is 4 percent below the supply of these seeds last year. The rise in production of these 7 legumes over 1957, was largely offset by a smaller carryover this year. Supplies are still much larger than domestic disappearance. Imports of clover seed later this year and the early part of 1959 could readily bring supplies up to last year's total.

Total supply of the 12 grasses is down 13 percent from the high level of 1957 but it is above the average of recent years. Production of grass seed in 1958 was 100 million pounds smaller than in 1957 and about the same as the five-year average. The bulk of the drop was in smooth bromegrass, crested wheatgrass and Sudan-grass seed. However, the 132 million pounds of grass seed carried over this year was twice that of a year ago and does much to offset the decline in production. In spite of above-average usage, domestic disappearance of grass seed in 1957 was 100 million pounds less than the supply available this year.

Total supply of 8 winter cover crops is substantially smaller than either the 1957-58 total or the five-year average. Both production and carryover of these seeds have declined in recent years. Domestic use has also declined in recent years, but in 1957 it was about equal to current available supplies.

Seed Prices Average Higher This Year

Prices received by growers for the five legumes and grasses, priced so far this year are higher than in 1957. Prices paid by farmers for legume, grass and winter cover crop seeds were slightly higher in mid-September, 1958 than last year, spring or mid-September a year ago. The September 15, 1958 index of prices paid by farmers for seed, at 216, was 3 percent above the index for the 1958 spring planting season and 3 percent above the index for September 1957. (See accompanying tables.)

The Situation for Individual Kinds

Alfalfa - The total supply of alfalfa seed (1958 production, carry-over on June 30, 1958, and imports for three months - July 1-Sept. 30 of this year), available for 1958-59 plantings is indicated at 208 million pounds. This is 6 percent below last year and 12 percent below the five-year average. Smaller crops this year in California, Washington and several other Western States account for the decline in supply since the June 30 carryover has averaged near 60 million pounds during each of the last two years. The smaller supply anticipated in 1958-59 is 67 million pounds more than the indicated domestic disappearance in 1957-58--more than ample to take care of export demand. Supplies of certified seed will probably be smaller than in 1957 principally because of smaller production in California. Indicated 1958 production of all alfalfa seed in that State, is 25 percent below the 1957 crop. Imports of alfalfa seed have been very small in recent years. They totaled only 93,000 pounds during 1957-58 and 81,000 pounds a year earlier. Exports during 1957-58 were record high at 18.6 million pounds. This is nearly one-tenth more than the total in 1956-57 but five times the average exports.

Retail prices of alfalfa seed were higher on September 15, 1958 than a year earlier for common alfalfa and certified Central and Northern Zone seed, but prices of certified Southern Zone seed were lower. However, the bulk of the seed used by farmers in 1958 was purchased at much lower prices last spring when retail prices of all alfalfa seed were substantially lower than a year earlier. Prices received by farmers for alfalfa in mid-October 1958 were 16 percent higher than during the same period of 1957.

Red Clover - The supply of red clover seed, at 10⁴ million pounds is slightly below last year when imports from Canada were above average, but it exceeds the 1957-58 domestic disappearance by 22 million pounds. Domestic disappearance of this seed in 1957-58 was one-seventh larger than a year earlier and the highest in 4 years.

Prices paid by farmers were down on September 15, 1958 from the 1957 level. Prices received by farmers for red clover in October 1958 were 17 percent above those of a year earlier.

Alsike Clover - The current supply of this seed available for planting during 1958-59, indicated at 18.3 million pounds, is 2 percent larger than the 1957-58 supply. With domestic disappearance at about 10 million pounds, this supply is more than ample for the coming year. Imports during the 3-month period July-September, 1958 were almost five times as large as the total imports of this seed during the 12-months ending June 30, 1958.

Retail prices of alsike clover dropped 12 percent between September 1957 and September 1958. During this same period prices received by farmers advanced 25 percent.

Sweetclover - The decline in domestic disappearance of sweetclover which started in 1950 continued into 1957 when only 50 million pounds of seed were used. Production has also declined while imports have increased--accounting for over one-quarter of the total supply in 1957. Significant quantities will need to be imported during the next 9 months in order for supplies to be adequate for a domestic disappearance as large as last year and allow for a normal carryover.

While no official estimate of sweetclover production in Canada is available there are indications that the 1958 crop may be 25 to 50 percent smaller than the 16 million pounds produced in 1957. The carryover by dealers in that country on June 30, 1958 was 3.1 million pounds or about one-half the large carry-over reported a year before.

Prices received by U. S. growers in October were 19 percent above those of a year earlier averaging \$8.60 per hundred.

White Clover - The total supply of 7.2 million pounds of white clover seed is 14 percent less than the 1957-58 supply. With domestic use last year at only 3.8 million pounds, this supply is more than adequate to meet prospective needs. The carry-over on June 30, 1958 was 4.1 million pounds, the largest on record and almost twice as large as that of 1957.

Prices paid by farmers for white clover seed in mid-September 1958 were slightly above those a year earlier, averaging 86.6 cents per pound.

Ladino Clover - The supply of Ladino clover available in 1958-59 is 8.2 million pounds, 27 percent below last year's supply and 60 percent below the 5-year average. As a result of the heavy carry-over accumulated during the peak production years, 1951 and 1952, and changes in seeding patterns, production has been cut back progressively for the past 6 years. Production in 1958, indicated at only 3.5 million pounds, is less than one-third of the average amount produced in those two record large crop years, and about one-eighth less than the domestic use during the past year.

Prices paid by farmers in September, at 72 cents per pound for the U. S., were nearly one-fourth higher than in 1957.

Lespedeza - The supply of lespedeza seed is indicated at 176 million pounds, 9 percent above last year and 33 percent above average. This supply is adequate to meet normal domestic requirements which during the past three years, following several droughty seasons, averaged 149 million pounds.

Timothy - Because of the small 1958 crop, supplies of timothy seed totaling 40.5 million pounds, are down 17 percent from last year. Domestic disappearance of timothy has declined in recent years but this year's small supply may be barely sufficient to meet domestic needs.

Prices received by growers for timothy doubled between September of 1957 and the same month in 1958 reaching \$15.80 per hundred. During the same period retail prices rose \$5.60 per hundred.

Orchardgrass - Current supply of orchardgrass is indicated at 18.6 million pounds, 21 percent below last year's record supply but only 6 percent below the five-year average. A supply of this size is slightly smaller than the domestic disappearance in 1957-58. However, if imports in 1958-59 reach the levels of the last five years, there will be enough seed to meet domestic needs.

Retail prices of orchardgrass seed increased only slightly in 1958 and are still below the high level of 1956.

Redtop - The supply of redtop seed, at 4.2 million pounds, is one-fifth below last year but it is close to average. This supply is sufficient for an average domestic disappearance.

Retail prices of redtop declined in 1958 from 1957 reaching 50.7 cents per pound, the lowest level of recent years.

Kentucky Bluegrass - The supply available for 1958-59 is indicated at 38 million pounds--more than twice the domestic disappearance of recent years. Production this year was almost unchanged from last year but the carryover was almost four times as large in 1958 as in 1957. Retail prices declined considerably from the year before reaching 68.3 cents per pound.

Merion Kentucky Bluegrass - The supply of this seed is substantially smaller than in 1957-58 due to both smaller production and carryover. This supply is below the domestic disappearance of 1957 but it is above the average for the last four years.

Fescue - The supply of tall fescue of 33.1 million pounds is only slightly smaller than last year but is a third smaller than the five year average. This supply will probably be adequate to meet demand equal to the domestic disappearance of the past few years, as use of this seed has been declining along with production. Current supplies of both Chewings fescue and red fescue are sharply below those of 1957-58. Domestic disappearance of red fescue in 1957-58 was considerably larger than the current supply this year while the supply of Chewings fescue is only slightly above domestic disappearance. However, reports from Canada indicate that red fescue production will be well above the 7.5 million pounds produced in 1957, and sizeable imports from that country will again be needed to augment the current U. S. supplies.

Bentgrass - Supplies of bentgrass are practically unchanged from last year but are twice as large as the 5-year average. Even though domestic use has increased by 75 percent there are adequate supplies of bentgrass available. The carry-over this year was the largest of record.

Smooth Bromegrass - Even though the 1958 crop of this seed was 69 percent smaller than last year's record, current supplies at 33.8 million pounds, are the second largest as much of the 1957 production was carried-over by farmers and dealers. Domestic disappearance in 1957-58 was relatively small continuing the downtrend in use that started in 1951.

Retail prices in 1958 were about one-fourth lower than a year earlier.

Crested Wheatgrass - The supply of crested wheatgrass is 17 percent below last year but is three times the quantity used domestically in 1957-58. Production this year was only one-fifth last year's record crop but the June 30, 1958 carryover was the largest of record.

Prices paid by farmers for Crested Wheatgrass averaged 25 percent lower in 1958 than in 1957.

Sudangrass - Supplies of this seed are 19 percent smaller than in 1957-58 principally as a result of sharp cutback in production this year. However, the record carryover of 56 million pounds offset much of the decline in production. Available supplies at 103 million pounds, are about double the average domestic requirements for agricultural needs. Because of the abundance larger quantities than usual of this seed will be utilized for birdseed or other non-farm use.

Winter Cover Crops - Total supplies of winter cover crops are about equal to the 1957-58 domestic use but 22 percent below the supplies available last year. Supplies of crimson clover, common vetch, purple vetch, and perennial ryegrass are considerable larger than the quantities used domestically last year, and those of hairy vetch barely cover the use. Supplies of all other crops are below desirable levels--Austrian peas and lupine are both sharply smaller than domestic needs, and supplies of common ryegrass are about 3 percent below the quantity used in this country last year. With the exception of crimson clover, production of all the cover crops declined in 1958 as compared with 1957. However, somewhat offsetting were the larger mid-year stocks this year for several of the cover crops.

Retail prices of all the winter cover crop seeds were higher this September than last but with the exception of common ryegrass, wild winter peas, and blue lupine, prices were below the relatively high levels of 1956.

Prices paid by farmers for seed: September 15, and spring season average (4-month average Feb. 15-May 15), dollars per 100 pounds clean seed, 1956-58

Kind of seed	Spring	Sept.	Spring	Sept.	Spring	Sept.
	1956	1956	1957	1957	1958	1958
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
	per	per	per	per	per	per
	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Alfalfa, Common	31.00	33.40	41.50	35.60	36.60	36.00
Alfalfa, Certified Northern and Central Adapted	1/36.20	1/40.80	50.50	41.30	42.80	41.80
Alfalfa, Certified Southern Adapted	---	---	36.80	33.50	31.30	30.60
Clover, Red	44.90	47.10	49.30	44.40	41.70	43.00
Clover, Alsike	36.50	42.10	48.00	41.10	34.60	36.30
Lespedeza, Korean	10.70	---	14.00	---	12.20	---
Clover, Crimson, Common	---	34.10	---	25.50	---	28.80
Clover, Crimson, Reseeding	---	38.50	---	30.60	---	32.70
Clover, Sweet	17.60	---	19.00	---	16.70	---
Clover, White	102.00	107.00	109.00	82.70	73.50	86.60
Clover, Ladino	85.50	82.30	79.50	60.20	60.50	72.00
Timothy	17.00	24.70	27.70	18.70	18.90	24.30
Redtop	72.80	74.10	71.00	57.80	49.00	50.70
Bluegrass, Kentucky	77.80	91.40	94.90	80.30	74.80	68.30
Orchardgrass	33.40	38.80	40.80	31.80	28.90	32.20
Sudangrass	10.10	---	12.00	---	8.83	---
Bromegrass, Smooth	30.10	43.40	49.80	29.00	21.40	21.80
Wheatgrass, Crested	50.10	54.70	58.50	37.60	24.50	28.00
Ryegrass, Common	14.20	11.10	13.80	9.50	13.40	14.80
Ryegrass, Perennial	---	22.40	---	18.00	---	21.00
Fescue, Tall	17.90	22.50	23.10	19.50	---	21.10
Peas, Austrian Winter	---	7.61	---	7.27	---	7.61
Peas, Wild Winter	---	10.30	---	10.40	---	11.50
Vetch, Hairy	20.00	19.90	20.90	16.80	---	19.30
Vetch, Common	---	12.80	---	9.82	---	11.00
Vetch, Purple	---	13.30	---	---	---	---
Lupine, Blue	---	5.30	---	4.46	---	5.91
Lupine, Sweet	---	14.40	---	6.94	---	9.00

1/ Certified Ranger, Buffalo, etc.

Source: U.S.D.A. - Crop Reporting Board

Prices received by growers for seed: Season average, dollars per 100 pounds clean seed, 1948-58

Kind of seed	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	Oct. 15, 1958
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
	per cwt.	per cwt.	per cwt.	per cwt.	per cwt.	per cwt.	per cwt.	per cwt.	per cwt.	per cwt.	per cwt.
Alfalfa	41.90	37.80	37.30	45.40	32.50	22.90	33.40	20.50	30.80	24.50	27.80
Red Clover	43.40	40.60	30.50	31.70	31.00	25.50	44.50	29.60	33.60	26.30	31.60
Alsike Clover	27.90	28.80	33.80	35.60	26.90	16.60	27.60	21.00	32.60	17.20	19.10
Sweetclover	13.70	14.80	11.80	9.81	9.32	9.19	11.10	9.53	9.40	7.75	8.60
White Clover	65.50	78.20	80.10	54.90	48.30	45.30	66.20	58.70	65.20	33.10	---
Ladino Clover	167.00	129.00	119.00	108.00	91.50	33.20	51.80	53.30	35.60	28.10	---
Lespedeza	9.13	6.83	8.77	12.00	18.10	18.40	19.50	7.84	10.30	8.23	---
Timothy	10.00	18.90	10.20	7.33	13.60	12.40	17.10	8.52	15.50	8.13	15.20
Orchardgrass	15.30	18.20	17.70	15.50	16.50	13.00	26.00	15.50	21.30	10.80	---
Redtop	41.30	42.00	34.30	23.30	37.70	51.30	56.20	36.10	42.90	19.50	---
Ky. Bluegrass <u>2/</u>	11.80	9.20	11.30	9.31	12.50	15.50	14.10	9.62	12.10	6.95	---
Smooth Bromegrass	20.30	26.70	17.60	13.80	22.00	11.90	11.00	16.50	30.00	8.00	---
Crested Wheatgrass	27.20	24.40	15.50	26.00	33.80	15.30	18.20	21.40	36.20	9.91	---
Sudangrass	5.68	5.37	7.34	7.05	10.50	5.21	8.99	4.57	6.40	3.06	---
Chewings Fescue	36.50	33.90	49.70	66.50	47.00	43.00	25.00	19.00	32.00	29.50	---
Red Fescue	40.50	39.20	51.90	69.30	48.30	41.30	25.50	22.30	42.30	33.80	---
Tall Fescue	41.20	43.50	40.80	50.90	25.40	12.50	15.40	9.17	13.10	9.90	---
Bentgrass	58.70	63.70	67.50	81.50	52.80	61.10	54.90	46.10	43.60	21.50	---
Hairy Vetch	18.20	16.10	15.10	14.90	13.50	11.50	11.20	13.30	13.90	9.81	---
Common Vetch	8.02	8.81	6.40	6.45	5.51	4.17	4.82	6.00	8.57	4.95	---
Purple Vetch	8.97	8.50	6.01	8.00	6.20	5.20	4.50	9.00	6.50	5.60	---
Common Ryegrass	7.80	9.70	7.50	9.00	6.70	8.90	7.00	5.60	4.75	4.25	---
Perennial Ryegrass	10.70	13.30	12.50	13.60	9.40	11.60	13.00	9.40	7.00	5.00	---
Aust. Winter Peas	6.01	4.36	4.47	3.61	3.10	2.65	2.61	3.32	3.20	2.27	---
Lupine	4.81	4.53	4.52	3.85	3.45	4.92	4.68	5.07	4.29	4.29	---
Crimson Clover	23.00	20.70	32.70	27.80	21.10	15.70	19.30	23.90	26.40	19.40	---

1/ Preliminary. 2/ Kentucky Bluegrass prices are for cured seed. Source: U.S.D.A.-Crop Reporting Board.

LEGUME AND GRASS SEEDS, AVERAGE 1952-56, ANNUAL 1957 AND 1958

Kind of seed	PRODUCTION	CARRYOVER	IMPORTS $\frac{1}{4}$	TOTAL SUPPLY	DOMESTIC DISAPPEARANCE		EXCESS OF 1958-59 SUPPLY OVER DOM. DISAPPEARANCE										
					Average : 1952-56 : 1957 : 1958 : Average : 1952-53 to : 1957-58 : Average : 1952-53 to : 1957-58 : Average : 1952-53 to : 1957-58	1956-57 : Sept. : 1956-57 : 1,000 pounds											
Average : 1952-56 : 1957 : 1958 : Average : 1952-56 : 1957 : 1958 : Average : 1952-53 to : 1957-58 : Average : 1952-53 to : 1957-58	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1956-57 : Sept. : 1956-57 : 1,000 pounds	1956-57 : Sept. : 1956-57 : 1,000 pounds	1956-57 : Average : 1952-53 to : 1957-58 : Average : 1952-53 to : 1957-58										
Alfalfa	173,521	160,815	146,871	58,968	59,627	61,161	3,212	7	235,701	1,000 pounds	220,535	208,039	159,602	140,796	1,000 pounds	1956-57 : 1,000 pounds	
Red Clover	79,781	72,711	80,269	30,254	28,967	23,525	3,485	60	113,520	1,000 pounds	105,820	103,854	80,366	81,535	1,000 pounds	1956-57 : 1,000 pounds	
Alsike Clover	10,945	11,656	9,546	5,726	6,884	7,347	3,109	251	1,438	1,000 pounds	11,920	11,991	13,331	12,417	1,000 pounds	1956-57 : 1,000 pounds	
Sweetclover	41,881	30,255	29,086	17,602	19,832	12,051	18,819	637	71,256	1,000 pounds	68,906	48,861	54,575	49,768	1,000 pounds	1956-57 : 1,000 pounds	
White Clover	3,961	5,877	3,089	1,380	2,204	1,100	1,262	298	38	6,603	1,000 pounds	8,379	4,944	3,839	5,714	1,000 pounds	1956-57 : 1,000 pounds
Ladino Clover	6,778	2,910	3,495	1,953	6,319	4,698	4	0	55	20,735	1,000 pounds	11,229	8,124	6,248	2,293	1,000 pounds	1956-57 : 1,000 pounds
Lepidium	122,742	141,685	162,175	10,320	19,815	14,297	0	0	0	133,062	1,000 pounds	161,500	176,432	119,144	147,243	1,000 pounds	1956-57 : 1,000 pounds
Total 7 Legumes	439,609	425,909	434,531	137,965	144,848	134,226	23,503	2,235	600,697	594,360	570,992	437,160	437,244	133,832	133,748		
Timothy	35,640	37,605	28,890	12,090	10,776	11,625	5,212	466	55	26,942	1,000 pounds	48,847	40,517	40,943	34,080	1,000 pounds	6,437
Orchardgrass	10,338	15,440	14,075	4,687	1,4161	1,4777	4,865	4,095	19,890	1,000 pounds	23,696	18,607	14,888	18,966	1,000 pounds	4,359	
Redtop	3,862	3,570	2,825	1,988	1,730	1,400	1	0	5,851	1,000 pounds	5,305	4,225	4,014	3,194	1,000 pounds	1,031	
Kentucky Bluegrass	15,697	24,550	25,575	5,948	3,616	12,195	611	843	132	22,256	29,009	37,902	16,222	15,687	21,670	22,215	
Merion Bluegrass	824	2,254	1,577	2,154	684	1,418	0	0	978	2,938	1,995	687	5,988	2,520	1,368	4,525	
Cheerwings Fescue	5,872	7,800	6,300	3,054	3,221	1,848	271	1,400	0	9,197	11,061	8,140	8,140	7,563	2,650	5,585	
Red Fescue	2,735	3,160	2,880	3,347	2,371	3,030	6,638	7,869	2,059	12,720	13,400	7,669	8,849	9,520	4,880	4,152	
Tall Fescue	33,786	23,055	27,715	18,799	11,317	5,390	3/	0	30	52,585	34,372	33,135	31,110	27,982	2,025	5,153	
Bentgrass	3,874	8,004	6,481	1,473	3,012	1,379	7/8	8	0	5,425	11,084	3,410	10,860	7,450	1,005	4,855	
Smooth Brome	9,445	34,272	10,495	7,338	2,006	23,240	7,587	352	64	21,370	36,630	33,799	18,013	11,730	1,786	22,069	
Crested Wheatgrass	2,130	10,120	1,812	1,977	7,354	7,225	128	33	0	3,335	10,907	9,037	2,118	3,032	6,919	6,005	
Sundangrass	56,707	104,705	46,320	10,743	22,461	56,423	77	0	0	67,527	127,166	102,743	53,361	68,993	49,382	33,750	
Total 12 Grasses	180,910	274,595	174,945	70,698	66,109	131,650	25,468	13,711	2,342	277,076	354,415	308,937	199,133	209,272	109,804	99,665	
Austrian Winter Peas	41,573	34,060	28,190	58,389	13,480	1,209	0	0	0	2,242	56,733	47,510	32,399	42,983	43,331	4,10,554	
Lupine	23,042	20,610	8,480	33,691	1,364	1,454	20	0	2,548	2,769	21,974	12,176	22,083	20,520	4,10,507		
Crimson Clover	18,823	14,163	18,395	4,182	1,444	3,377	1,095	0	0	62,865	34,986	26,677	22,608	22,829	4,10,507		
Hairy Vetch	38,824	22,575	17,925	23,550	11,328	8,752	491	0	4	23,723	9,260	7,633	11,699	6,776	4,10,507		
Common Vetch	12,325	7,130	5,145	10,407	2,330	2,484	991	0	4	11,448	9,572	8,496	8,497	4,10,507	4,31		
Purple Vetch	8,664	9,360	6,600	1,909	2,088	2,972	0	0	10,573	108,428	80,581	83,187	82,847	8,476	1,096		
Common Ryegrass	94,544	68,960	59,500	20,200	41,404	21,081	184	64	0	114,988	51,021	44,577	23,192	30,749	4,2,606		
Perennial Ryegrass	25,096	35,190	28,400	4,051	15,530	16,172	2,301	1	105	31,448	51,021	44,577	30,749	21,485	13,928		
Total 8 Winter Cover Crops	262,891	210,348	172,635	158,379	88,713	58,568	7,364	3,708	5,120	428,634	302,769	236,323	254,040	235,601	4,17,717	722	
Grand Total 27 Crops	883,410	910,892	782,111	367,042	299,670	324,444	55,955	41,022	9,697	1,306,407	1,251,544	1,116,252	890,333	882,117	225,919	234,135	

1/ July 1 to June 30.

2/ Short time average.

3/ Data not available.

4/ Deficit.



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UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

NATIONAL ECONOMIC SITUATION AND OUTLOOK FOR 1959

Talk by Nathan M. Koffsky
Agricultural Economics Division
at the 36th Annual Agricultural Outlook Conference
Washington D. C., November 17, 1958

This year, in sharp contrast to the outlook of a year ago, we can look forward, with considerable assurance, to a growing economy over the year ahead. We are still recovering from the recession and we expect that recovery to be steadily reinforced by rising demands from consumers, from business and from all levels of government, including Federal, State and local units. Consumer incomes, which were well maintained during the recession, have risen to a new high in recent months. A further significant gain is in prospect in 1959, and with recent price trends showing some degree of stability, the purchasing power of the average consumer could well be enhanced.

The events of the past year divide rather neatly into two periods of about equal length, recession in the fall and winter a year ago and recovery since spring. The recession cut somewhat deeper into most economic indicators than the previous post-war declines of 1948-49 and 1953-54. Gross national product--the value of all goods and services produced--dropped some 20 billion dollars, or about 4 1/2 percent between the third quarter of 1957 and the first quarter of 1958, and after allowing for the continued rise in prices, the decline in real output was close to 6 percent. Total nonagricultural employment declined some 5 percent from the 1957 summer high by April, with factory employment and output down substantially more, particularly in the durable goods industries. The work week in manufacturing earlier this year was the shortest in the post-war period. Unemployment, aggravated by rapid growth of new entries into the labor force as well as reduced employment, exceeded 5 million persons.

The recovery, which developed sooner this time than in the previous post-war recessions, has brought significant gains in output and employment even though the 1957 summer highs have not yet been regained. Although gross national product was up some 1 1/4 billion dollars between the first and third quarters of 1958, the physical volume of goods and services produced in the recent quarter was still some 3-4 percent lower than in the third quarter of 1957, after adjusting for generally higher prices than a year ago. In the manufacturing sector, employment has not risen as fast as production, reflecting a lengthening in the work week close to last year's level, and apparently a substantial increase in overall productivity per man-hour. In recent months, however, there have been some reductions in total unemployment, including a decline in the number of persons out of work 15 weeks or longer. Nevertheless, in October, the number unemployed totaled about 3.8 million compared with 2.5 million in October 1957.

In recent months, the persistent rise in prices of the past several years appears to have leveled off. The BLS wholesale commodity price index has shown little change since mid-year with some declines in prices of farm products and processed foods offsetting slight increases in wholesale industrial commodity prices. Similarly, the BLS consumer price index and the AMS index of prices paid

by farmers for family living have moved in a relatively narrow range for some months, with a tendency toward lower prices of food but some increases for automobiles and medical service rates. Although the price indexes show increases over the fall of 1957 of about 1 percent at wholesale and 2 percent at the consumer level, the rises were substantially less than those that occurred in the preceding 12 month period.

Let us turn now to the areas of weakness and strength in the economy which brought recession and then the recovery. Table 1 summarizes the ebb and flow of expenditures over the past year from the 3 main sources of demand--consumers, business and government.

Table 1.- Gross National Product

	3rd	1st	3rd	Change	
	quarter	quarter	quarter	3rd 1957: 1st 1958	to : to
	1957	1958	1958	1st 1958: 3rd 1958	Bil. Dol.
	Bil. Dol.	Bil. Dol.	Bil. Dol.		
Gross National Product	<u>445.6</u>	<u>425.8</u>	<u>440.0</u>	<u>-19.8</u>	<u>+14.2</u>
Personal consumption expenditures	288.3	286.2	292.0	- 2.1	+ 5.8
Private investment	70.3	50.1	55.0	-20.2	+ 4.9
Government purchases of goods and services	87.0	89.5	93.0	+ 2.5	+ 3.5

(Seasonally adjusted annual rates)

Source:

U. S. Department of Commerce

In the recession stage, from the third quarter high of 1957 to the first quarter low of 1958, most of the decline was concentrated in the business private investment sector where the rate of expenditures was reduced by some 20 billion dollars or almost 30 percent. Consumer expenditures, in total, showed only a small decline of 2 billion dollars, less than 1 percent, while government outlays for goods and services increased 2 1/2 billions, about 3 percent.

In the recovery phase so far, from the first quarter of 1958 to the third quarter, each of the sectors has contributed to the recovery. The rate of consumer expenditures rose almost 6 billions to a new high. Investment outlays regained one-fourth of the preceding sharp drop. Government outlays rose 4 percent in the 6 month period, somewhat more than the increase in the preceding 6 months.

Table 2.- Personal Consumption Expenditures

	3rd quarter 1957	1st quarter 1958	3rd quarter 1958	Change	
	Bil. Dol.	Bil. Dol.	Bil. Dol.	3rd 1957:1st 1958 to : to 1st 1958:3rd 1958	Bil. Dol.
Personal consumption expenditures	<u>288.3</u>	<u>286.2</u>	<u>292.0</u>	<u>- 2.1</u>	<u>+ 5.8</u>
Durable goods	40.4	36.3	36.5	- 4.1	+ 0.2
Nondurable goods	140.5	139.8	143.0	- 0.7	+ 3.2
Services	107.4	110.1	112.5	+ 2.7	+ 2.4
Consumer disposable income	308.7	305.0	314.0	- 3.7	+ 9.0
Savings	20.4	18.8	22.0	- 1.6	+ 3.2
Personal savings rate	6.6%	6.2%	7.0%	- 0.4%	+ 0.8%

(Seasonally adjusted annual rates)

Source:

U. S. Department of Commerce

The detail for the consumer shows that weakness in this sector in the recession period was limited very largely to a sharp reduction in expenditures for durable goods, particularly for automobiles. Expenditures for nondurable goods showed only a slight reduction and within that group, expenditures for food increased substantially. Rising consumer spending for services, such as rent and medical care offset much of the drop in other consumer outlays.

In the more recent period, consumer spending for nondurables and services has risen sharply, even though expenditures for durable goods have not improved. Even with automobile sales running one-fourth below 1957, the total volume of goods and services purchased by consumers in the third quarter of this year was only slightly less than the total volume taken a year earlier.

It should be noted, in considering the strength in consumer markets generally, that the aggregate flow of income to consumers was reduced very little during the recession period, and in recovery has been substantially enlarged. Much of the impact of the decline in wage and salary payments on the consumer markets was offset by larger unemployment compensation and social security payments and by a substantial improvement in farm income. Thus, consumer income, after taxes, in

the first quarter of 1958 was only a little more than 1 percent below the pre-recession peak. Further, dollar income in the third quarter of 1958, exceeded the previous high by 2 percent, although with higher prices and increasing population, the purchasing power per capita of that income was still somewhat below that of a year earlier.

As usual during a recession, consumer spending was reduced somewhat less than income, and the personal savings rate out of current income showed some decline by early 1958. Generally also, in the early stages of recovery, the growth in income exceeds that of expenditures. Thus, the rate of savings increased between the first and third quarters of this year. Total consumer installment credit outstanding at the end of September was slightly less than a year earlier, in contrast to substantial increases each year since 1954.

Table 3.- Private Investment Expenditures

	3rd quarter 1957	1st quarter 1958	3rd quarter 1958	Change	
	Bil. Dol.	Bil. Dol.	Bil. Dol.	3rd 1957: 1st 1958 to : to	1st 1958: 3rd 1958 Bil. Dol.
Private investment	<u>70.3</u>	<u>50.1</u>	<u>55.0</u>	<u>-20.2</u>	<u>+ 4.9</u>
Residential construction	16.9	17.1	17.9	+ 0.2	+ 0.8
Non-residential construction	19.7	19.2	18.4	- 0.5	- 0.8
Producers' durable equipment	28.0	22.9	22.3	- 5.1	- 0.6
Change in business inventories	2.2	- 9.5	- 4.0	-11.7	+ 5.5
Net foreign investment	3.6	0.5	0.5	- 3.1	0

(Seasonally adjusted annual rates)

Source:

U. S. Department of Commerce

Most categories in the investment sector showed sharp reductions in expenditures by the first quarter of 1958. The rate of business outlays for inventory purposes declined some 12 billion dollars as the inventory position shifted from a modest build-up in the third quarter of 1957 to the heaviest rate of liquidation of the post-war period, earlier this year. This factor alone accounted for half of the total drop in expenditures in the economy. Much of the reduction in inventories was in the durable goods industries. Business investment outlays for new construction and equipment, after 3 years of steady build-up, fell off reflecting, among other factors, a substantially enlarged capacity. However,

farmers' expenditures for new machinery, showed improvement. Merchandise exports of the United States dropped almost 20 percent while imports were down relatively little. Thus, contrary to general expectations, our exports have been more vulnerable to the recent slowing of economic activity in some foreign countries than their exports to us have been when our economy moved down. During this period from the third quarter 1957 to the first quarter 1958, expenditures for residential construction did not change significantly from the relatively low levels of the summer of 1957. Expenditures for new housing had dropped appreciably since 1955.

The increase in investment outlays during the recovery period has come largely from a slackening in the rate of inventory reductions. The level of business inventories is now some 6 billion dollars under a year ago. Stock-sales ratios have trended down and currently are below those of a year earlier. Residential construction has improved significantly following rapid commitment of funds made available for federal purchases of mortgages under the new program enacted early this year, and from more liberal credit terms for FHA and VA assisted housing. The rate of new housing starts has risen from less than 1 million units earlier this year to over 1.2 million in September, the highest in 3 years. The decline in business investment outlays for new plant and equipment has been fairly small in the last 6 months. Nor has there been significant change in our net foreign trade position with the levels of both exports and imports continuing about at the first quarter levels.

Table 4.- Government Purchases of Goods and Services

	3rd quarter 1957	1st quarter 1958	3rd quarter 1958	Change 3rd 1957:1st 1958 to : to 1st 1958:3rd 1958	
	Bil. Dol.	Bil. Dol.	Bil. Dol.	Bil. Dol.	
Government purchases of goods and services	87.0	89.5	93.0	+ 2.5	+ 3.5
Federal	50.9	50.9	53.0	0	+ 2.1
National Security	(46.9)	(45.6)	(46.5)	(- 1.3)	(+ 0.9)
State and local	36.1	38.6	40.0	+ 2.5	+ 1.4

(Seasonally adjusted annual rates)

Source:

U. S. Department of Commerce

During the recession phase, the government sector provided an increasing flow of expenditures to the economy. Federal purchases of goods and services in total, were about the same in the first quarter of 1958 as in the third quarter

of 1957 but transfer payments, such as unemployment compensation, rose sharply while the flow of taxes to the government was reduced. There was, however, some reduction in outlays for national security. State and local government expenditures, which have risen at the rate of about 3 billion dollars annually for some time, increased 2 1/2 billions in the 6 month period.

In the recovery period, total government expenditures have increased somewhat faster than in the earlier period. Federal outlays have risen for national security as well as for other programs, including expanded Commodity Credit Corporation activities. State and local government expenditures continued to rise but at a somewhat slower rate than in the previous 6 month period. The expanding federal-aided highway program is expected to account for almost 30 percent of total capital expenditures for highways by all units of government this year.

Before turning to the outlook for 1959, it would be well to summarize that the recovery so far has reflected an increasing contribution to economic activity by government, continued strength in some consumer markets, improvement in residential construction, and a lessening in the rate of business inventory liquidation. Some strength also derives from the apparent leveling off of the declines in the other areas, including consumer durable goods purchases, business capital outlays for new plant and equipment and our export trade.

With respect to the prospective major expenditure flows which will likely shape the economy in 1959, it seems clear that government outlays will continue to rise. State and local government expenditures for schools, highways and other facilities, particularly those associated with suburban growth, will very likely continue their strong uptrend. The federal contribution to the highway program, according to estimates of the Bureau of Public Roads, will be much larger next year than this year and will account for some 40 percent of total capital expenditures for highways in 1959. Federal budget expenditures, according to the Budget Review of September, will total over 7 billion dollars more in the current fiscal year and a substantially larger budget deficit is being incurred this fiscal year than in fiscal 1957-58. While part of the increase in expenditures reflects increased outflows such as social security and unemployment compensation payments, and interest on the public debt, a further significant increase from current levels is in prospect for direct federal purchases of goods and services, particularly for national defense.

There is likelihood also of a substantial increase in outlays in the investment sector, primarily as a result of changes in the business inventory situation. The reduction in business inventories, which has lessened appreciably in recent months, will likely come to a halt. Inventory policy may well turn again to some build-up as 1959 progresses. Final consumption of goods is high and increasing. Business inventories have declined substantially and in relation to sales are below a year ago and back to the level of the fall of 1956. Residential construction outlays will in all probability also increase from current levels reflecting the current high rate of new housing starts. Requests for VA appraisals and FHA commitments are running substantially higher than earlier this year and there has been resurgence in apartment construction. Construction costs have held relatively stable during the past year.

It now appears that the sharp decline in business investment in new plant and equipment has come to a halt. The third quarter survey of business plans for capital outlays conducted jointly by the Securities and Exchange Commission and the U. S. Department of Commerce indicates that prospective expenditures for the fourth quarter are much the same as in the third quarter with only the railroad industry continuing to retrench. The very recent McGraw-Hill survey of anticipated capital outlays in 1959 indicates that present plans are for about the same level of expenditures overall as for this year. But it would not be surprising to find some increase in capital outlays developing during 1959. Corporate profits are rising sharply. According to the National Science Foundation, research and development expenditures in industry increased from 3 1/2 billion dollars to 6 1/2 billions between 1953 and 1956. Such activities lead to new products and new processes requiring capital outlays. It seems likely, however, that such improvement as may be realized in capital outlays next year will be modest considering the heavy investment programs of previous years. Also, the improvement may come more in outlays for machinery to improve efficiency than in new plants. Thus, industrial construction may continue weak for some time. But commercial construction, including office buildings and stores, which has remained high, should continue so.

The net contribution of our foreign transactions to economic activity here could well show some improvement. These transactions in the past year have sharply increased foreign gold and dollar holdings in the United Kingdom and some other industrialized nations. In some countries also, declines in economic activity earlier this year appear to have been reversed.

Thus, the prospects are for an increased flow of expenditures from the broad range of categories in the government and private investment sectors, although some investment categories may show only slight increases. Under these conditions we would expect output and employment to continue to improve and wage rates to rise further. Wage and salary income, currently near its previous peak, will probably be increased substantially although some part of the increase may be offset by some drop in farmers' income from farming. Higher consumer incomes will most likely mean higher consumer spending, thus augmenting the rising demands in the other sectors of the economy. For nondurable goods, such as foods, and for services, the increase in spending may be roughly proportional to the rise in consumer income. Consumer expenditures for durable goods, however, may well show a more substantial increase. This year automobile sales are totaling perhaps 4 1/2 million, including an increased proportion of foreign makes, compared with a level of close to 6 million in each of the 2 preceding years. The rate of sales this year is not much above the annual rate of scrappage of used cars. In addition, consumer installment credit outstanding on automobiles has been substantially reduced over the past year. With respect to other durable goods, the rising rate of housing completions will likely strengthen demand for household appliances, as well as for household goods generally.

These are the demand prospects for 1959 as we see them. They provide for continued gains in economic activity and in the level of living for the average consumer. The recent relative stability in prices overall could well continue into 1959 as supplies of some foods increase. Whether the residue of higher

unemployment remains or diminishes depends substantially on how fast the labor force and productivity increase over the year ahead, both of which have shown considerable variation in growth rates in recent years.

It may be that our appraisal has been on the conservative side, especially for capital goods outlays and perhaps for automobile sales. These increased sharply in the boom which followed the 1954 recession. But we think they are more likely to rise less this time. Further, the history of these annual conferences in the 1950's suggests that we should not underrate the continuing cold war which more often than not tightens the economy as well as international relations. We need to remember Korea, Suez, Sputnik and outer space, and the Far East as economic factors.

UNITED STATES DEPARTMENT OF AGRICULTURE

NEEDS AND PROSPECTS FOR PUBLIC ACTION TO
FACILITATE RESOURCE ADJUSTMENTS

(Excerpts of a talk given by George E. Brandow, Professor, Department of Agricultural Economics, Pennsylvania State University, at the 36th Annual Agricultural Outlook Conference, Washington, D. C., November 18, 1958)

Government action can make a significant contribution in helping agriculture solve its adjustment problems of the future. Five adjustments which offer real opportunities for government or public action include the following:

(1) Reduction of the Agricultural labor force--especially in low income areas. Excess labor in such areas tends to perpetuate itself. Also, when these people overflow into other areas, they often aren't equipped to do well for themselves. Hence a chief need is for education to give them skills which will help them adjust to their new situation. This is not strictly a farm program. It requires, in my judgment, federal aid for education, a long-range effort. It also offers opportunities for a more immediate type of action such as vocational training, employment information, some financial assistance for cost of relocation, etc.

(2) Building up small farms to form adequate business unit. This requires farm management type of information enabling farmers to appraise their opportunities on the farm.

(3) Shifting land to lower uses, such as converting crop land to pasture. Government could lease land and develop it into forest and recreational areas. State governments could have substantial roles in this.

(4) Changes in type of farming--especially in some wheat and cotton areas. Again farm management advice is necessary for selecting the best farm enterprises and funds for new sorts of investments.

(5) Development of local non-farm resources to which farm people can turn. This is a question of stimulating local action and providing some funds for investments which may be necessary.

As for prospects for public action, we might think of three kinds of approaches for public action. They are:

(1) A frontal attack on major adjustment problems. This means identifying a problem and undertaking aggressive programs directed at solving it. Several such programs would have the result of reducing employment of agricultural resources in fairly large regions of the country. These programs have very little political support and will

probably not be developed in the near future. Programs looking toward building up local resources are more acceptable. The Rural Development program could be expanded. And quite possibly, the next Congress will pass and the President will approve an Area Redevelopment bill which would include depressed rural areas.

(2) Indirect action taken by modifying existing programs of government agencies now serving agriculture. For example, the Extension Service can direct a larger part of its program to assisting farmers with adjustment problems. Farmers Home Administration and Agricultural Credit Agencies could also adapt their programs to supply credit more suitable for financing some of these adjustments. The greatest opportunities lie in indirect action.

(3) Adopting price and income programs that make some contribution to agricultural adjustment. An example: Conservation Reserve. Production control devices of the future may involve negotiable quotas on quantities sold and the negotiability characteristic would tend toward locating agricultural production in the areas of greatest comparative advantage.

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Outlook for Clothing and Textiles in 1959

By

Harry Kahan, U. S. Department of Labor
Before The
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My approach to the outlook for textiles and apparel relies principally on an examination of trends since World War II, and an appraisal of their implications for the coming year. I have also given consideration to opinions expressed by informed industry sources. Although the textile and apparel industries have a very close interdependency, I shall discuss each separately, taking up the cotton, wool, and man-made fiber sectors of the textile industry first, and then I shall talk about apparel.

Cotton Industry

Cotton still accounts for the major share of the textile market. In 1957, almost 4 out of every 5 yards of broadwoven goods were made of cotton. Despite the growth of man-made fibers, cotton has stood its ground remarkably well. At no time has cotton accounted for less than 76% of total broadwoven goods production. In 1957, the figure was 79%. What happens to cotton, therefore, is of particular significance in a discussion of textiles.

An appraisal of the outlook for cotton textiles for the coming year is helped by a review of the industry's position now and in the recent past with respect to demand, supply, and prices. From the end of World War II through 1957, the total U. S. mill consumption of cotton fiber fluctuated from year to year, but, on the whole, total consumption has shown no definite upward or downward trend. But per capita consumption of cotton fibers has exhibited a definite downward trend. (Except for 1955, per capita mill consumption of cotton fiber has steadily declined since 1951 from 31.5 pounds to 23.7 in 1957.) Some of cotton's losses may be attributed to inroads made by man-made fibers and to other cotton substitutes such as paper and plastics. Cotton also shared in the general per capita decline in consumption of all the fibers.

While the relative demand for cotton textile products has tended to decline, supplies have been increasing, especially during the past couple of years. The extent of inventory accumulation of cotton broadwoven goods as derived from statistics compiled by the American Cotton Manufacturers' Institute is shown by the fact that in 1957 inventory in relation to production was up 80% over 1951. For the first 5 months of 1958 there was still lower mill activity and higher inventories than the comparable period last year.

NOTE: Appreciation is expressed to Pauline Mufson for her assistance in the preparation of these remarks.

As may be expected from such a disparity between supply and demand, price levels for cotton textiles have been somewhat depressed. The BLS price index for cotton textile products has remained well below the base period 1947-49 level during most of the post war period. Between 1948 and 1949, the index declined 12% and brought the 1949 index level down to 92 where it hovered until the advent of the Korean conflict. It rose sharply to a peak of 119.2 by February 1951 but a year later the level of the index for cotton textile products was again below its base of 100 where it has since remained. In 1957, the yearly average was 90.7 and this year it looks as though the average will wind up between 88 and 89.

Briefly, the picture of the cotton textile industry seems to shape up as follows: There appears to be an adequate raw cotton supply on hand to take care of domestic consumption and exports for almost two years while at the same time there are no definite signs of sharply increased demand for cotton textiles during the coming year. Current plant capacity to turn out cotton textiles continues to be adequate to meet next years demands. Also, there is no strong prospect for general or substantial wage hikes in the industry next year.

Against this background I do not foresee any significant change in the level of prices for cotton textile products next year. I believe that with improving general economic conditions, modest price changes may occur on the upside. This is because mill margins during the earlier part of this year were exceptionally low, and the industry has tended to resist further price cuts. Some success may also be anticipated in efforts to bring inventories into more realistic alignment with demand.

Man-Made Fiber Industry

Man-made fibers rank second to cotton in importance. In 1957, man-made fibers accounted for 28% of total fiber consumption in actual pounds as against 66% for cotton. (On a cotton equivalent basis - a method used for comparing relative yields from equivalent quantities of fiber - man-made fibers' share of total fiber consumption increases to 38% while cotton declines to 58%. This increase of man-made fibers share of consumption occurs because a pound of man-made fiber goes a longer way than a pound of cotton. For example, it has been estimated that a pound of cotton will average 3.5 square yards of cotton apparel fabric while a pound of man-made fiber, depending on the type, will average 4.5 square yards of rayon and acetate and 7 square yards of nylon apparel fabric. These comparative yields of fabrics from a specific weight of fiber is sometimes referred to as "covering power" or "Utility poundage.")

Man-made fibers fall into two main classifications: the cellulosics and the non-cellulosics. The cellulosics consist of rayon and acetate. The non-cellulosics include nylon, dacron, orlon, fiber glass, and others. The distinction between the cellulosics and non-cellulosics is important because it is the latter that has been almost entirely responsible for the growth of the man-made fiber textile industry since World War II.

During the 1947-49 period consumption of man-made fibers on an actual pound basis comprised about 18% of all textile fibers. By 1957, consumption rose about 55% to capture 28% of the market for all textile fibers. As previously mentioned the non-cellulosic man-made fibers were primarily responsible for this phenomenal growth. Although the cellulosic fibers, that is rayon and acetate, expanded their market by about 10% in the 10 years from 1947 to 1957, the non-cellulosics' share of the market soared more than 750%. Rayon's success in capturing the tire cord market is the principal reason why cellulosic consumption increased during the decade instead of declining. For example, production of rayon and acetate broadwoven goods dropped from an average of 2.1 billion, linear yards in 1947-49, to 1.5 billion yards in 1957. During the same period, production of broadwoven non-cellulosics increased from 80 million to 779 million yards.

Since 1955, the use of rayon and acetate as a textile, (not as tire cord) has continued to decline, although in the first half of 1958, it was up slightly from the comparable 1957 period. The use of non-cellulosics in textiles, however, has been climbing sharply and almost continuously. Although in the first half of 1958 consumption of non-cellulosics was lower than the corresponding period last year this downward turn seems attributable chiefly to the general recession which had been protracted and severe in many segments of the textile industry. Despite this interim decline, the growing market for man-made textiles will take place chiefly in the non-cellulosics. The properties which won them wide acceptance such as dimensional stability, strength, and easy laundering, has made non-cellulosics particularly desirable for blending with other fibers.

Along with wool and cotton, the man-made fiber textile industry has felt the effects of the recession which started in 1956 for the textile industry. The August 1958 Wholesale Price Index for man-made fiber textile products stood at 80 which is about 2% below the 1956 average and a new all time low since 1947. Although man-made fiber producers have tried to balance supply and demand, the extent of the recession in textiles had created fairly large inventories in most of the industry. This situation has tended to keep prices on the soft side. However, a whittling down of inventories and continued improvement in the general economic climate should encourage firmer prices. The increased emphasis on wash and wear fabrics should also contribute to a growing demand for non-cellulosics. The industry has anticipated this growth with expanded facilities; consequently, it seems unlikely that shortages will occur because of lack of capacity. Indeed, with more companies entering this field, it should create a competitive environment that should tend to hold within modest bounds price increases that may be encouraged by generally improved economic conditions.

Wool Industry

The sharpest decline in prices and consumption took place in the woolen and worsted industry. With the advent of the Korean conflict, wool prices rose sharply. The wholesale wool products price index soared 61% between March 1950 and March 1951. This price bulge all but collapsed within the next 12 months. Thereafter price declines were more gradual, with the index drifting downward until early 1956 when it returned to the March 1950 index level of 102. Although during 1957 average wool prices were 6% above the average of 1956, they declined shortly thereafter to new low levels. The index now hovers around 100.

By any measure, the decline in woolen and worsted consumption can be judged as severe. The 1947-49 average U. S. mill consumption of wool was 4.3 pounds per person. In 1957, this figure was virtually halved to 2.2 pounds, and may be even lower for 1958. (In only 3 years during the 1930's was lower per capita mill consumption of wool recorded). During the same period (1947-49 to 1957) wool's share of all textile fiber consumption fell from 10.5% to 6.2%. Again comparing the 1947-49 period with 1957, woolen and worsted broadwoven goods production fell from 476 million yards to 293 million or about 38%. Present indications point to still lower yardages for 1958.

The long term decline in woolen and worsted consumption is traceable to factors which have been operating in good times as well as bad. There has been a trend toward lighter weight clothing which has reduced the amount of wool used in garments. Men's year round weight suits, for example, are being made of lighter weight fabrics than was the case in prewar days. Another factor which has contributed to the deterioration of wool's position has been the relative instability of wool prices. When prices of raw wool soared, manufacturers of woolen apparel fabrics were fearful that they would be priced out of the market and started to look around for more stable-priced fibers to blend with or substitute for wool. Alert to the opportunities provided by rising wool prices, the man-made fiber manufacturers strongly promoted their products and engaged in extensive research to improve them. Another and more recent cause for declining wool consumption has been the poor business experienced by men's clothing manufacturers during the past few years. In 1957 production of men's suits was 1.3% below 1955 and 4% below 1956. The declines for overcoats and topcoats were much sharper: 35% below 1955 and 40% below 1956. Comparing the first six months of 1958 with the corresponding period in 1957, suit production was down 21% and coats down 9.2%. Since the men's clothing industry is a major market for woolens and worsteds, these declines in production seriously affected the woolen industry.

Perhaps the most devastating blow to the woolen and worsted industry has been dealt by man-made fibers, particularly the non-cellulosics. Fabrics once 100% wool are now appearing in blends containing as high as 70% of the newer man-made fibers while the recent introduction of a type of dacron more suitable for blending in heavier fabrics threatens to make deep inroads in wool consumed in year round weight suits.

Since many of the man-made fibers have properties of dimensional stability, shape retention, and easy laundering, the increasing emphasis on wash and wear type fabrics will tend to improve their competitive position with respect to wool even more.

In the third quarter of this year prices, production, and consumption of wool and wool products were off sharply. Although in absolute amounts, apparel wool inventories are fairly modest, the ratio of total stock to mill consumption as of the beginning of the year was the highest since 1948. What then is the outlook for wool in 1959.

Further improvement in general economic conditions should serve to bolster prices and perhaps increase consumption slightly. But unless ways are found to impart "easy to care for" characteristics in wool fabrics, such gains are likely to be quite limited in view of the aggressive and effective competition from man-made fibers.

Summary for Textile Industry

Economic indicators show that the textile industry participated much less than most industries in the prosperity which prevailed during most of the past decade. From 1947 to 1957, the index for industrial production for all manufacturers rose 45%, but textile mill products declined almost 3%. In the same period, average weekly earnings rose 65% in all manufacturing as against 41% in the textile mill products industry. Since 1949, profit rates for the textile industry have compared quite unfavorably with rates for all manufacturing industries.

In 1956 mill activity as measured by production and consumption started to decline in the textile industry and the price level went down slightly - about 1%. The price level for all textiles remained the same in 1957, but the decline in mill activity continued at an accelerated pace. As of June of this year, price levels fell for all major textile products, and production and consumption have again dropped. Keen competition prevails in most sectors of the textile industry and tends to hold prices down. This tendency is further reinforced by the sharp competition among the fibers with marketing programs and research being carried on vigorously to promote particular blends, finishes, and constructions. Competition is particularly keen in the wash and wear field.

Another significant fact which applies generally to the textile industry is the declining trend in U. S. per capita consumption of textile fibers, which fell from 45 pounds in 1950 to around 36 pounds in 1957. Only the non-cellulosics - nylon, dacron, etc. - showed an increase in per capita consumption. Even after making allowance for the greater yield of non-cellulosic fiber, there still remains a significant decline in the per capita consumption of all textile fibers.

Thus, in a decade when most industries fared quite well, the textile industry's performance was, at best only fair. While many industries established new highs in production and prices, the textile industry's production and prices either lagged behind or ran counter to the trend. Further improvement in economic conditions should promote increased output and some firming of prices. But these improvements are not expected

to be of a magnitude to support any significant price increases next year.

Apparel

Before appraising the outlook for apparel in 1959, let's review recent developments, making some comparisons with last year on production, prices and consumer expenditures.

The extent of the slowdown in the apparel industry during the recent recession is partly illustrated by the Federal Reserve Index of production for Apparel and Allied Products which showed a steady decline from August 1957 through March 1958. With the exception of blouses, all categories of apparel cuttings declined in the early months of 1958 from the preceding year. Though output improved slightly between March and June, the index was lower than for the comparable period in 1957. The July figure, however, showed an improvement over July 1957.

The men's suit industry operated at 72% of capacity in August 1958, down from about 81% in August 1957. Production of most categories of men's tailored clothing was off the first half of 1958 when compared with the corresponding periods for 1956 and 1957. In general, the declines were much more pronounced in clothing made of 50% or more wool than in clothing tailored of man-made and other types of fibers. Separate dress and sport trousers production declined 45% from last year for those made chiefly of wool but increased 11% for those made of other materials.

The production of women's, misses, and junior's outerwear garments were all lower in the first half of 1958 than a year earlier with declines ranging from 3% for skirts to 10% for suits. Hosiery shipments also showed a slight drop and shoe production was off in the first six months of 1958.

Prices

Apparel prices have shown a high degree of stability over the past several years in contrast to most hard goods. At the wholesale level, the apparel index in September was 99.3 and has fluctuated within a narrow range of less than 2% in the last 6 years, based on yearly averages. During the same period, the yearly average Consumer Price Index for apparel fluctuated within a range of not more than 3%. As of mid year 1958, the consumer apparel index was but 1% above its average of 1952.

Footwear, which is a segment of the apparel index, rose considerably in the past several years. If footwear were excluded from the apparel index, the apparel index would show a decline from 1952.

One reason for the stability of apparel prices is that its principal raw material - textiles - had, in general, been declining in price. This has tended to either offset or dilute considerable increases in other costs of production.

The widespread practice at both the wholesale and retail levels of selling at established price lines also tends to keep price fluctuations at a minimum. In addition, there has been no great surge in the demand for apparel. While aggregate demand for apparel has increased, it is keyed chiefly to population growth. Consumers have shown little inclination to allocate a larger share of their increased incomes to apparel. This somewhat passive demand situation does not generally encourage price increases.

Consumer Expenditure Pattern for Apparel

Aggregate clothing expenditures in the past-war period have been expanding steadily, but the increase is due chiefly to the growth in population. However, during the past decade, the share of the consumer dollar spent for clothing had dropped steadily, nor has there been any reversal of this trend even after periods of recession. The ratio of expenditures for clothing and shoes to total expenditures has dropped from 11.4% in 1947 to 8.7% in 1957, and for the first half of this year has fallen below 8.5%. Although per capita clothing and shoe expenditures rose from \$131 in 1947 to \$145 in 1957, in terms of 1947-49 dollars, per capita expenditures for both years are practically the same.

As measured by aggregate or per capita expenditures, apparel has not done very well compared with most other major categories of consumer goods. One reason is that apparel prices have advanced only moderately in relation to the prices of most other goods and services. Another is the change in the ratios of the different age groups in the population. The percentage of older people has been increasing. Because of smaller incomes and diminished clothing needs, older people spend less on clothing. The relative growth of this sector of the population, therefore, tends to reduce per capita expenditures for clothing. But the factor which seems most responsible for inhibiting the growth of apparel expenditures has been the successful competition from other types of goods and services. In parcelling out his dollar for the vast and expanding array of goods and services available to him, the consumer has been assigning a declining importance to the role of apparel. There are no apparent signs that the consumer will in the near future change his attitude toward the importance of clothing. It, therefore, appears quite unlikely that a significant reversal in the clothing expenditure pattern may take place next year.

Clothing Outlook for 1959

Although apparel sales for the first half of this year were below those for the corresponding period last year, there is a growing optimism among merchants and manufacturers that apparel sales this year may equal or exceed those for 1957. Many members of the trade are confident that the gains will continue through 1959.

Cautious buying policies pursued by both retailers and manufacturers during the recession have worked down inventories. Retailers bought very conservatively earlier in the year to reduce stocks and counted on increased turnover to maintain sales. Manufacturers have been equally reluctant to accumulate inventories so that they too exercised closer controls on purchases and production. A low inventory position favors an outlook for increased production of apparel.

This optimistic trade outlook for clothing is also based on the general improvement in economic conditions and signs of increased activity in apparel markets. According to the Federal Reserve Board, consumers have weathered the recession quite well. Personal income has again started to increase and the finances of consumers have not been seriously impaired by the recession. Consequently, consumers are in a pretty good position to go to market and spend money. For while the apparel industry has not shared as fully in the national prosperity as most other industries, it nevertheless benefits from good times. The apparel trade leans heavily on these bright spots when forecasting the optimistic sales outlook for apparel.

Women's and Girls' Clothing

In the past five years, and so far this year, prices of women's and girls' apparel have fluctuated within a narrow price range.

Earlier this year, new wage agreements were negotiated covering the bulk of women's dress manufacturers. As a result of wage increases and fringe benefits provided by the agreement, it has been estimated that labor costs would be increased from approximately 12 to 20 percent. So far there is no clear evidence that this increase has affected retail price levels or that it has caused any pronounced shift to higher price lines by manufacturers. The impact of the wage increase has been mitigated somewhat by two factors. One is that ample piece goods have been available at low prices. The other is that the relatively simple styling of current fashions held down labor costs. What may happen is piece goods prices rise or styles become more complex is open to conjecture. Also, the almost infinite variations in styling and design which may be incorporated in fashion apparel, as well as the broad range of materials available, provide a relatively high degree of maneuverability in rearranging various cost elements. The curtailment of trimmings is one of the economies, for example, that is adopted to compensate for increased labor costs.

In the knitwear industry, active demand together with wage increases, should help firm prices for sweaters and other knitwear next year. Coat and suit ordering is also up. As big ticket apparel items, these are bought with some degree of caution by retailers. No price increases are anticipated for this category of apparel. Underwear prices are also expected to remain unchanged for next year.

Men's and Boys' apparel

It appears that at both the wholesale and retail level the relatively stable 1958 prices for men's and boys' apparel will remain pretty much unchanged next year.

One development supporting this belief is the recent announcement by manufacturers of lower wholesale prices for men's suits. Reductions at wholesale ranging generally from 50 cents to \$1.50 reflect lower prices for woolen and worsted fabrics. It is difficult to evaluate these reductions at the consumer level for there is no indication as to the extent to which these wholesale price reductions will be reflected in retail prices. With increasing costs of operation, retailers may find it advisable not to pass along small wholesale price reductions.

Prices of other items of men's and boys' clothing are not expected to vary much, and next year's price level for men's and boys' apparel will probably remain pretty much at this year's level. The trend toward the greater use of fabrics and fibers other than wool apparently will continue. While suits made of man-made and cotton fibers have dominated the summer weight suit market, wool's position in the year round suit field had remained unchallenged. However, this season year-round suits made of dacron-worsted blend have been put on the market in larger volume. The shift toward the increasing use of man-made fibers in men's suits is likely to continue next year.

Footwear

The prices of footwear according to BLS indexes are about 30% above the 1947-49 average at retail and 22% at wholesale. For the first 9 months of 1958 retail shoe prices advanced .8% as compared to 1.1% for the same period in 1957. Two major shoe manufacturers have recently indicated that they may raise prices further though some have been booking orders through next February at current prices. Indications are that shoe prices may be somewhat higher next year.

Wash and Wear

For several years, increasing effort has been devoted to the production of clothing requiring a minimum amount of care. The ultimate goal is the development of clothing which will look immaculately laundered and pressed after emerging from an automatic washer and dryer.

Although the ultimate goal has still not been achieved, considerable strides have been made. More and more clothing carries a wash and wear tag, bearing a legend to the effect that little or no ironing is necessary, or that perhaps a little touch may be required. But it must be remembered that frequently the ease of care implied by the words Wash and Wear has fallen considerably short of the claims made by the manufacturers.

The industry is now attempting to formulate objective standards for evaluating the performance of Wash and Wear fabrics and clothing in order to remove the confusion as to just what Wash and Wear means. Much work has yet to be done to overcome manufacturing problems which arise in making wash and wear clothes. These problems are engaging the active attention of the textile and apparel industry and next year should bring further advance in Wash and Wear technology.

Even at this stage of technology, the sale of Wash and Wear fabrics and clothing has been very substantial. In 1957, 20% of cotton fabrics were treated for Wash and Wear, and the proportion may double this year and increase still further in 1959. Although a comparative newcomer, wash and wear dress shirts, according to trade sources, may account for the major part of dress shirt production by the end of this year. Consumer preference has turned sharply towards children's apparel labeled Wash and Wear. Wash and Wear should continue to be the most important development in textiles and apparel in 1959.

Summary for Textiles and Apparel

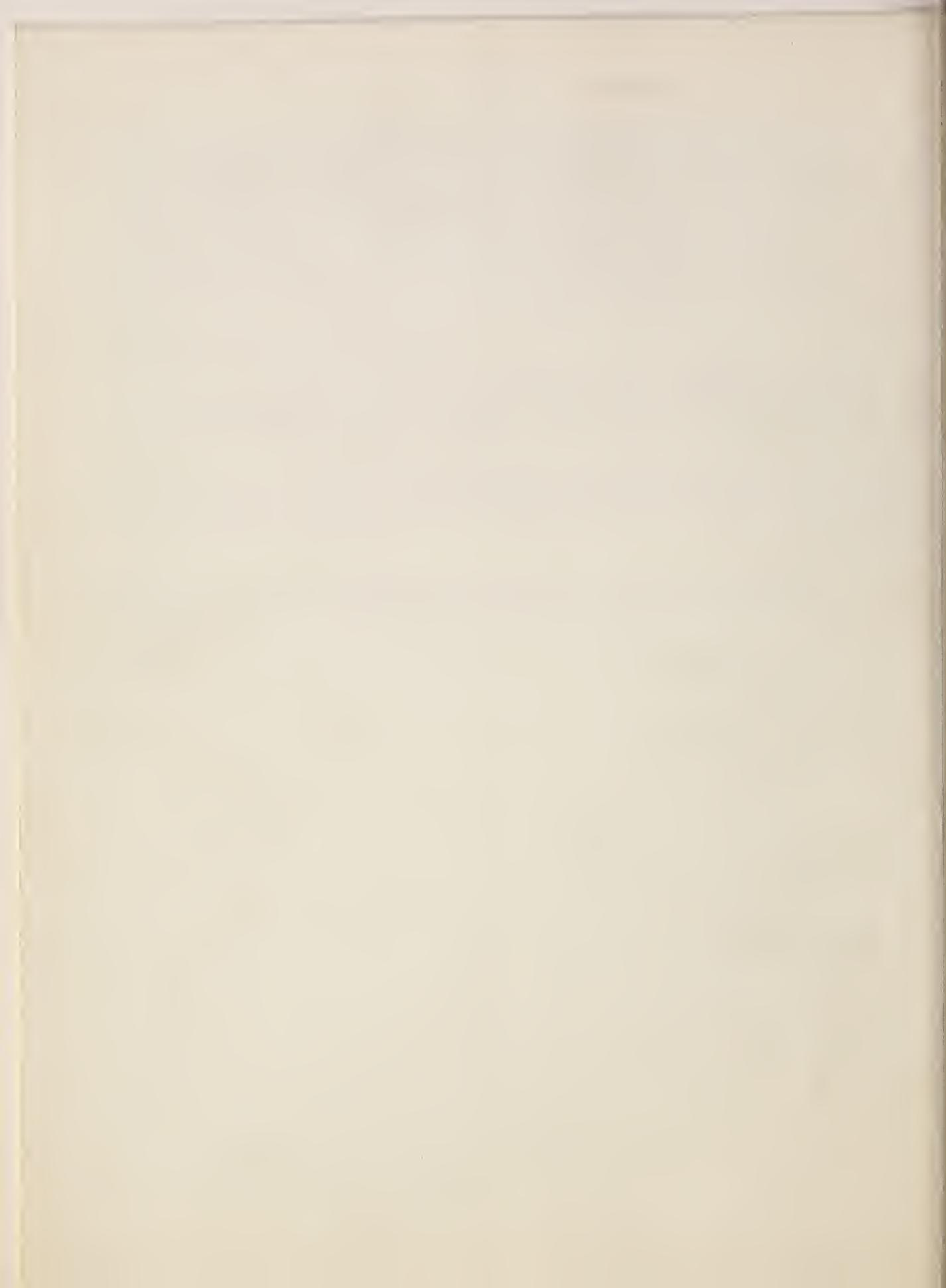
To sum up, apparel and textile manufacturers have a brighter outlook for 1959 and look forward to increased output and sales, due chiefly to a more favorable economic climate.

Generally, clothing prices are not expected to vary significantly from this year's levels. This appears to be the price outlook for apparel in 1959 based on an examination of industry practice, its past performance and current developments.

The proportion of disposable income consumers spend on clothing is expected to remain substantially unchanged or to decline slightly.

Increasing emphasis will be placed on Wash and Wear apparel.





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UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

THE OUTLOOK FOR COTTON 1959

Statement Presented by Doris D. Rafler at the
36th Annual Agricultural Outlook Conference,
Washington, D. C., November 19, 1958

1959 will indeed be a year of decision for the American cotton farmer. In the current season the main problem for many farmers was how to overcome the financial effects of the disastrous blow that weather had dealt to the 1957 crop, when the quality of the 11 million bales produced was the lowest on record. First, cotton farmers placed nearly 5 million acres in the Soil Bank, 2 million more than in 1957. Then they took about 12 1/2 million acres of their best cotton land, applied advanced production practices--gave a piece of their mind to the weatherman--and produced record yields. The 11.7 million bale crop is being harvested on the smallest acreage in history. With quality relatively high, the average yields of close to a bale an acre, at current price supports, substantially raised per-acre income from cotton. The combined effect of Soil Bank participation and yield trends has been to increase the proportionate importance of the West and Southwest in cotton production and reduce the importance of the traditional cotton areas. (Figure 1.)

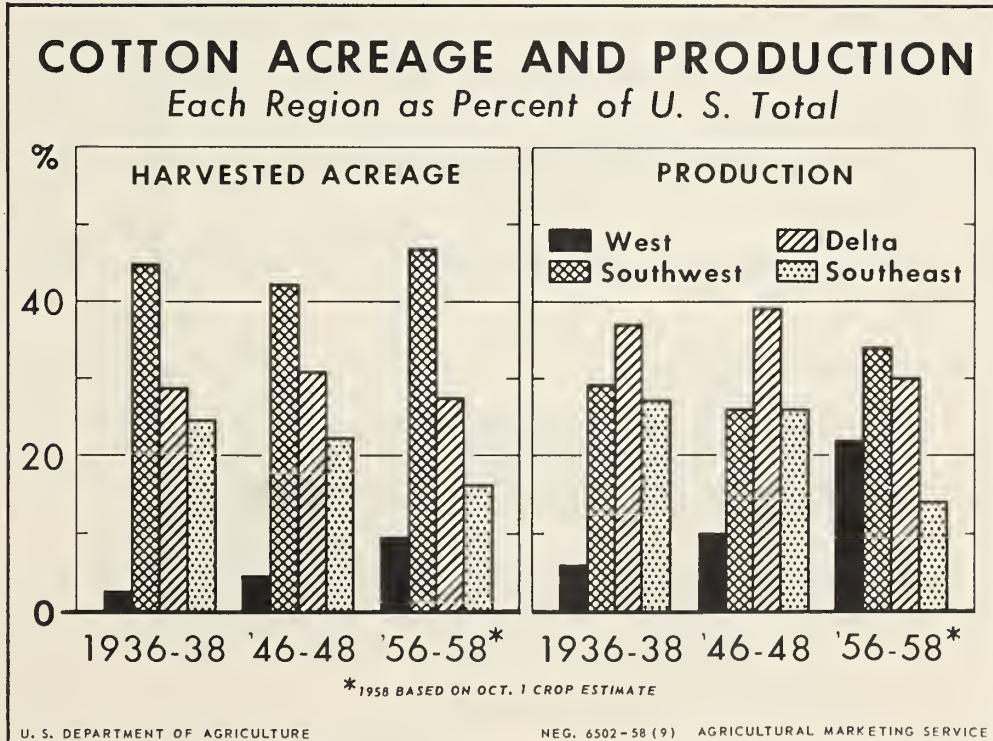


FIGURE 1

The national acreage allotment for the 1959 crop of upland cotton was set by Congress at not less than 16 million acres, and a national acreage reserve to meet minimum farm allotments was set at 310,000 acres. This total allotment of 16.3 million acres has been apportioned to States and counties, and individual farm allotments will be in the mail soon. The national marketing quota for upland cotton was set at 12,167,000 bales of 500 pounds gross, the number of bales required to provide the minimum national allotment set by Congress. The national average yield used in this calculation, was thus about 365 pounds per acre. In 1956 when harvested acreage totaled 15.6 million acres, yield per acre was 409 pounds. For the past 6 years the average annual increase in yields has been $7\frac{1}{2}$ percent. The 1958 record yield of 472 pounds per harvested acre is somewhat above this trend. As you know, the referendum on accepting marketing quotas will be held December 15. Approval of two-thirds of the farmers who grew cotton in 1958 and who vote in the referendum is required to put quotas in effect. If quotas are not approved, farmers planting within their allotments will be eligible for price support at 50 percent of parity.

On the other hand, if, as is likely marketing quotas are approved, the choice provisions of the Agricultural Act of 1958 go into effect. Under these provisions each farm operator who has an upland cotton acreage allotment may elect to comply with his "regular"--called Choice (A)--farm allotment, in which case his crop will be eligible for the full level of price support available for the crop (not less than 80 percent of parity for 1959); or he may elect to comply with the farm's Choice (B) farm allotment--which is 40 percent more than

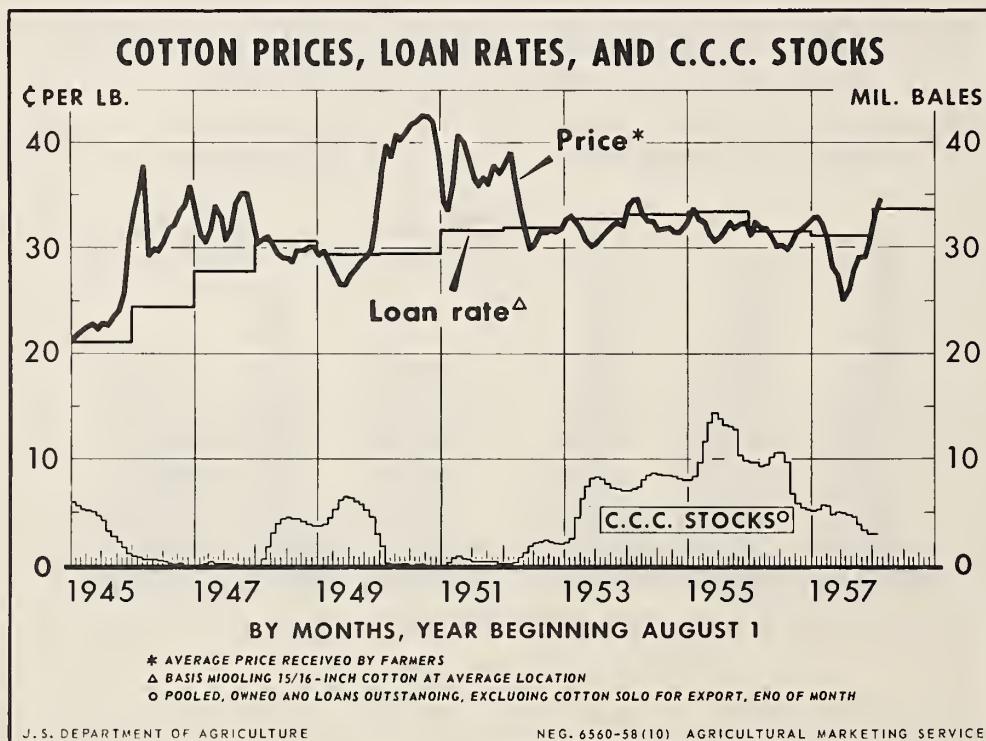


FIGURE 2

the Choice (A) allotment, and be eligible for price support at a level which is 15 percent of parity less than the level available under Choice (A). Final price support levels will be announced by January 31. The Agricultural Act of 1958 also provides that CCC sales of its stocks for unrestricted use shall be made at not less than 110 percent of the Choice (B) level of support percent of parity. Figure 2 shows that since 1952 prices received by farmers have remained relatively close to the loan rate

At 1958 parity prices the 15 percent of parity difference between price levels under Choices (A) and (B) is about \$29 per gross weight bale and between Choice (A) and the minimum CCC sales price level it is about \$16.50 per bale. If only a small number of farm operators should elect Choice (B) and domestic and possibly export needs during 1959-60 are largely met by cotton sold from CCC stocks, prices received by farmers would tend to be near the CCC selling price. If on the other hand a large number of producers choose (B) the market price would tend to be closer to the Choice (B) support level. One of the unknowns in the picture is the extent to which export demand will be met from CCC stocks.

The current and prospective supply and demand situation for cotton, at home and abroad, will be one of the factors which will influence the decision of cotton farmers whether to elect Choice (A) or (B). The past season witnessed the second successive reduction in the carryover. The August 1 carryover of 8.7 million bales was 2.6 million below a year ago and 5.8 million below the record high of August 1, 1956. (Figure 3.)

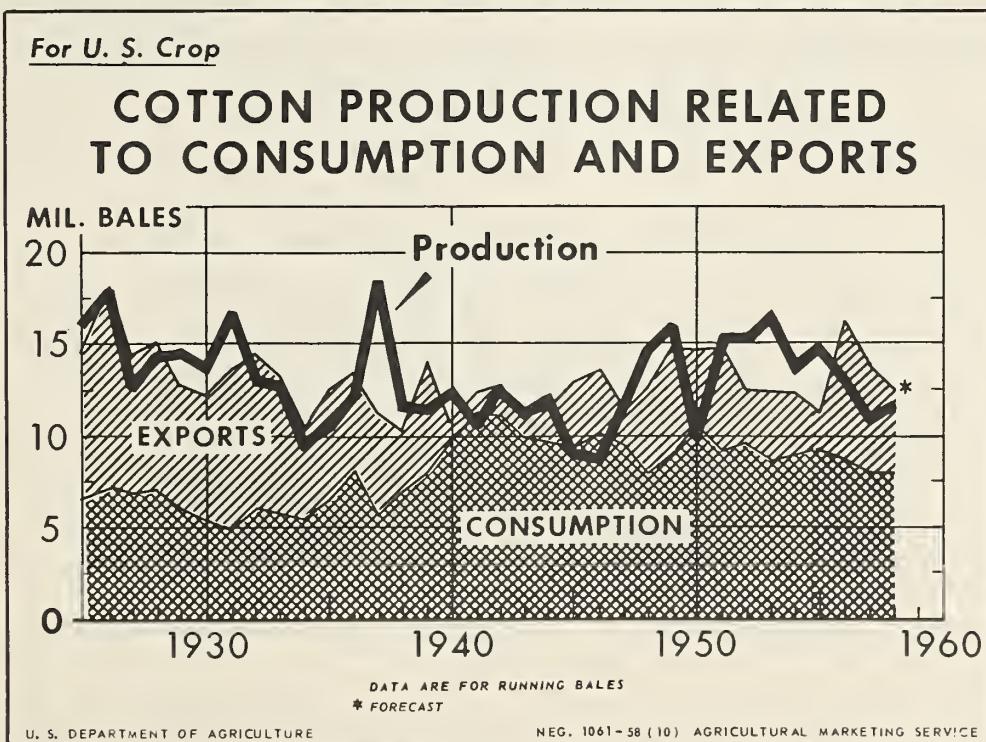


FIGURE 3

The main factors behind this reduction were large exports and decline in the production. Domestic consumption during the past 2 seasons showed a declining trend. For the current season a further small decline in carryover is likely as total disappearance of around $12\frac{1}{4}$ million bales will exceed the 1958 crop. Reduction in the carryover will take place despite a sharp decline in exports and will reflect somewhat higher domestic consumption. It is probable, however, that CCC stocks will again increase following a 3-year reduction. This outlook seems to raise two questions: (1) What is causing a decline in exports from the relatively high level of the past 2 seasons? (2) What factors are likely to rise domestic consumption?

Generally speaking, when U. S. and foreign prices are competitive, United States exports fill the gap between foreign production and consumption. This is true because of the existence of trade and payment arrangements between foreign countries and because in most importing countries the demand for all types of U. S. goods often exceeds available dollar resources. Foreign exporters for the most part lack the financial and storage facilities to hold stocks. Major importers tend to maintain stocks at an average level equal to 4 months' consumption, but year-to-year variations in this stock ratio for balance-of-payment reasons or in expectation of higher or lower prices can have a significant short-term effect on U. S. exports. (Figure 4.)

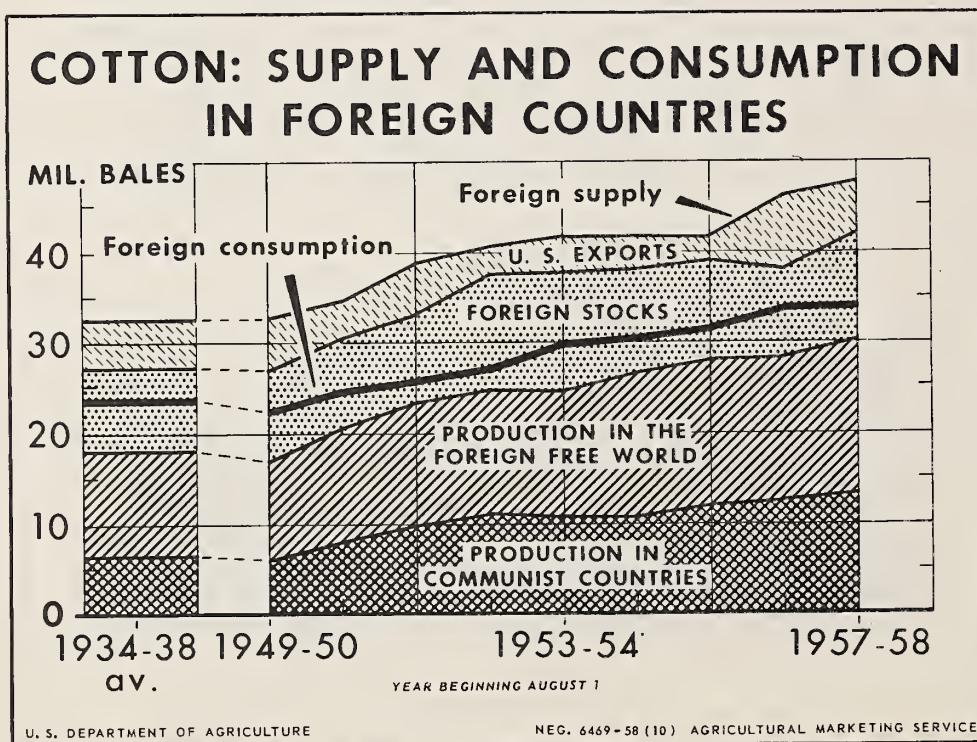


FIGURE 4

Because of larger foreign exportable supplies, reduced foreign consumption and no likely increase in importers' stocks, the export outlook for U. S. cotton in 1958-59 is less favorable than in the last 2 years.

Carryover stocks in foreign exporting countries were about 600,000 bales higher on August 1, 1958 than a year earlier. Foreign free world production is expected to increase again in 1958--by as much as 1 million bales. The greatest increase during 1958-59 will be in the extra-long staple varieties. Thus, total indigenous supplies in the foreign free world during 1958-59 will be about $1\frac{1}{2}$ million bales above the previous season.

On the other hand, the steady postwar increase in foreign free world consumption halted early in 1958. During the entire 1957-58 season, consumption at 20.4 million bales was over a half million bales below 1956-57. Some major foreign customers for U. S. cotton, including Japan and the United Kingdom, were hit by reduced domestic and export demand for yarns and textiles. Stocks of raw cotton at the beginning of the current marketing year in most of these countries were at "normal" levels relating to consumption, and below a year earlier.

Furthermore, foreign prices have moved down in recent months and in October were considerably below the 1957-58 average; many reached postwar lows. Prices for nearly all higher grade foreign growths are currently below comparable U. S. qualities.

Under these circumstances it appears that U. S. exports will not likely exceed 4 million bales. Such a figure would be 1.7 million bales below 1957-58. This estimate is predicated on a further decline in consumption and much larger production abroad. If textile stocks abroad are worked off and mill consumption should resume its postwar rise, or if foreign production falls short of indicated levels, or if the augmented foreign output--largely in long-staples, remains unsold--a significant increase in U. S. exports could take place.

Now let us turn to domestic consumption. For the past 3 years, the textile industry has faced a cyclical downturn in demand. Per capita cotton consumption in 1957 reached its lowest level since 1938. This was partly a continuation of a steady postwar decline due to the competition from the newer fibers which pound for pound replace more than an equivalent amount of cotton. However, in the past two years, although cotton consumption declined significantly, cotton held its own relative to all other fibers and continued to supply two-thirds of the fiber market. The lower per person use of cotton has also been a reflection of lower per capita consumption of all fibers, due to the more informal pattern of living, the shift of population to warm areas, and the rising proportion of low-clothing-spenders in our expanding population. (Figure 5.)

The lower trend of clothing expenditure was accentuated in 1957-58 by the recession. Consumers generally spent less and saved more. The turnaround in the economy is reversing this tendency. Incomes are rising and are expected to do so in 1959. Consumer expenditures are also rising, including retail sales of apparel.

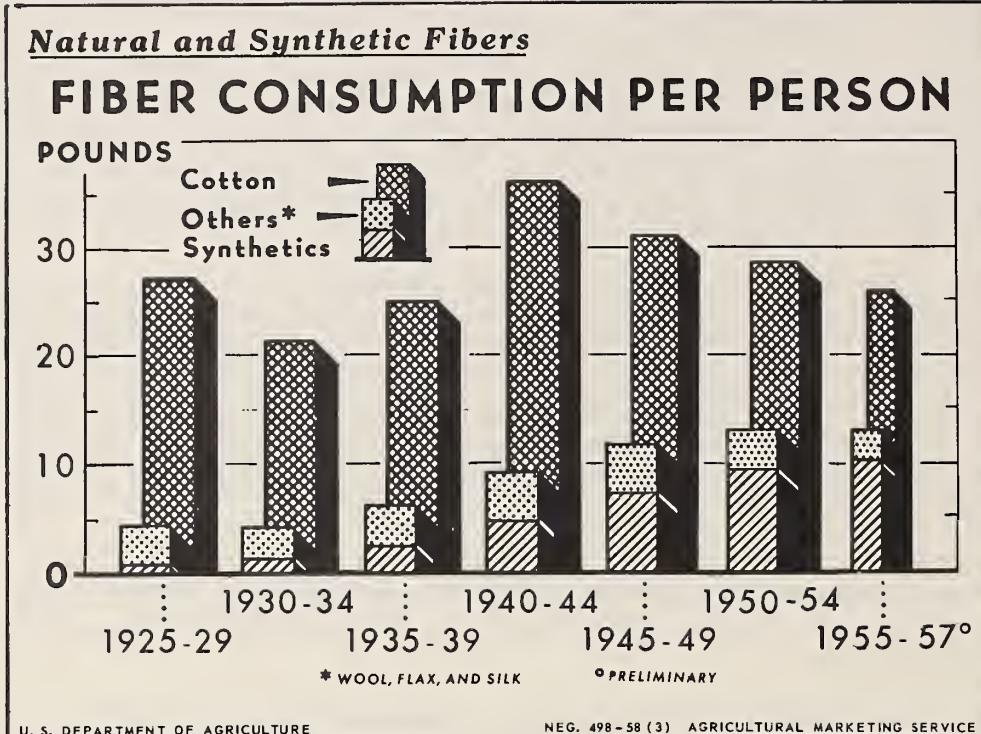


FIGURE 5

Mill consumption of cotton--which declined from 9.2 million bales in 1955-56 to 8.6 million bales in 1956-57 and 8.0 bales in 1957-58--has also been kept down by the existence of large inventories relative to new orders. These inventories have gradually been worked down, and are currently considerably below last year. Mill consumption on the other hand, while still below last year has picked-up in recent months. The daily rate of mill consumption in September was 98 percent of the 1947-49 average. If it were to continue at this rate the total could be $8\frac{1}{2}$ million bales. The current estimate is halfway between this figure and the 8 million bales consumed last year.

The estimate is based on population, consumer income, the current rate of production and new orders, comparative prices of other fibers and all the other factors which are known to affect mill consumption. One of these factors beclouds the picture. This is the continued low level of mill margins, that is, the spread between fabric prices and the cost of the raw cotton used therein. If the trade goes through with its reported intention of across-the-board stock reduction--even in face of an upturn in demand--the textile recession may be prolonged.

On final word on the carryover. With disappearance estimated around $12\frac{1}{4}$ million bales, and the 1958 crop plus imports totaling around 11.8 million bales, a further small reduction in the carryover appears likely from the 8.7 million bales reached on August 1, 1958. (Figure 6.) Nearly 6 million bales of the 1958 carryover was in private hands. CCC stocks totaled 2.9 million bales. Thus while the total carryover was reduced by 5.8 million bales from the high reached on August 1, 1956, CCC stocks declined by nearly 7 million bales. The spectacular reduction in Government held stocks will probably be reversed this season. Since the sum of the privately held carryover, the new crop and imports exceeds estimated disappearance by nearly $5\frac{1}{2}$ million bales, and private stocks are currently being reduced, it appears likely that a fairly substantial part of the 1958 crop going under loan will be acquired by CCC.

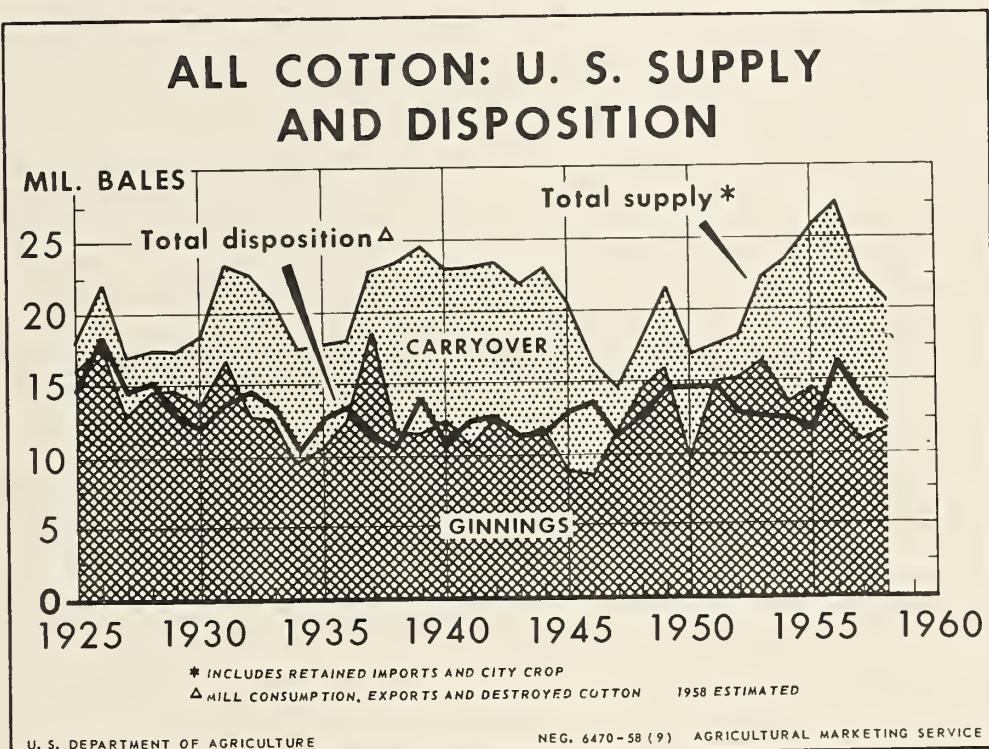


FIGURE 6



OUTLOOK FOR DAIRY PRODUCTS
IN 1959

Statement presented by H. C. Kriesel at the
36th Annual Agricultural Outlook Conference
Washington, D. C., November 20, 1958

The statistical position of the U. S. dairy industry improved further in 1958. In the year ahead the supply of milk products promises to be more nearly in balance with consumption in commercial outlets at prevailing support levels than in any of the past six years.

For a substantial part of the improvement in the general dairy situation in the past year the dairy industry can thank the meat animal industry. This is not to say that the dairy industry has become a captive of the meat animal sector of agriculture. But it illustrates the importance of being thankful for what one might call small favors. As you may realize, the surplus of dairy products, though measured in billions of pounds, still was not as large as the surplus for some other products. Of the milk produced in the year ended last March, the CCC bought about 5 percent, measured on a milkfat basis. In the current marketing year the comparable figure probably will be less than 3 percent. Developments in the meat animal price picture contributed to this shift. Output of meat in the past year was below expectations, and this gave rise to higher than expected prices for both hogs and beef cattle. The result -- a twofold effect on the dairy industry. Number (1), consumer demand increased considerably for cheese; number (2), attractive meat animal prices helped to induce the largest drop in milk cow numbers since 1948 - 3.5 percent.

American cheese is the only dairy product for which demand increased significantly in the past year. Its use declined in 1956 to interrupt a long upward trend. The rebound in 1958 presumably is partly a resumption of this trend. But for the most part, the unusually sharp gain last year must be attributed to the sharp rise in retail price of meat. Retail cheese prices increased only slightly in 1958, compared with an increase over 1957 in retail prices of 15 percent for beef products and 10 percent for pork. The rise in cheese consumption, is equivalent to an increase in milk consumption from commercial sources of over 1 billion pounds. Even though there was a slight decrease in per capita consumption of most other items from commercial sources, the increase in population carried the total commercial milk use up by about $1\frac{1}{2}$ billion pounds over 1957. In addition, the School Milk Programs and distribution of butter and cheese from CCC supplies carried the total civilian milk use up 1.6 billion pounds. So the total milk usage in all civilian channels topped 120 billion pounds in 1958 for the first time, compared with 117 billion pounds in 1957.

For 1959, with some increase likely in consumer incomes, and probably little change in retail prices for dairy products or beef products, we probably will observe an increase in commercial use at least paralleling the population gain, possibly a little larger.

Now what are the prospects for the production of milk? First, by way of background it must be noted that the slight decline in 1958 followed 5 years of substantial increases in total milk production. During all the period of increased milk output, cow numbers have been declining, except in 1953. By way of an arithmetical explanation, we say that the increase in rate of production of milk per cow offset the yearly drop in numbers of cows. Further, again by way of an arithmetical explanation, we say in 1958 the reduction in numbers of cows offset the increase in rate per cow which attained a new record high. But what lies back of these two developments, and what are the prospects?

The increased production of milk per cow reflects the selection of animals with higher production potential, the feeding of greater amounts of concentrate feeds per head, and supplying of a larger quantity and better quality roughages. So far there has been no diminution in the rate of increase, even among cows producing double or more the present U. S. average of 6,300 pounds. In brief, the consensus of observations points to a continuation of the present rate of increase in production per cow, at least until the output reaches a much higher level.

As for numbers of cows, we have seen a decrease for nearly 15 years except for the slight upturn in 1953. This represents the net effect of an exodus of farmers from producing milk, as they choose to specialize in other lines of farming, and an increasing scale for those remaining in milk production. Some dairymen have shifted out of agriculture altogether. Moreover, dairymen who continue operating tend to increase their scale of operations as the change in technology makes this possible, or even requires it. For the next year or so the number of milk cows will continue to show a considerable decline, though probably not as sharp as in 1958, since presumably the biggest impact of the sharp rise in meat animal prices already has had its effect. After beef prices begin to recede we probably can expect a decline in the number of milk cows nearer the range of other recent years, 1 to 2 percent per year.

The upshot of the above considerations suggests that total milk output probably will show only a small increase in 1959. We probably will see larger increases in subsequent years, as feed grain supplies continue large and the attractiveness of other livestock enterprises diminish from that of 1958.

So much for the prospects for some key elements in the dairy outlook.

Now, what are some of the implications of these conclusions? The number one consideration in the minds of many is what will happen to the size of the milk surplus. With production of milk in 1959 probably increasing less than civilian use of milk from commercial sources, there is likely to be a further reduction in the volume of milk purchases, at least in terms of milkfat. Quantities very likely will be smaller than distribution of butter and cheese from CCC stocks during 1958. But with farmers continuing to sell a larger proportion of the solids-not-fat which they produce, the surplus of this item will continue at a high level through 1959.

So long as there is a surplus at prevailing support prices, there will not be a change in the price level to farmers unless the support level is changed. Prices to farmers for manufacturing milk and butterfat

are being supported at 75 percent of parity this year, the lowest permitted by present legislation. The parity index has been essentially stable since last spring when the support level was announced for this year. If it continues stable, the legal minimum support level for 1959-60 will be near that of this year. The actual support level for the marketing year to start next April 1 has not yet been decided. It will be announced before that date. In 1959 the supply of milk would be so near in balance with prospective demand at the present support level that the surplus of milkfat could be doubled, or could disappear entirely, due to moderate changes in production or in demand. In the autumns of both 1957 and 1958 purchases of butter and cheese ceased entirely for several weeks.

For a number of years farmers have been increasing sales of milk faster than production, reflecting decreased use in farm households. With a likely increase to a new record high in farmers' milk sales in 1959, cash receipts may well exceed slightly the record set in 1957 of 4.6 billion dollars. In recent years, with the drop in numbers of dairy farmers, income per dairy farm has been increasing, even with a slight decline in gross receipts for the country as a whole such as occurred in 1958. Data for certain "typical, model" dairy farms indicate that net incomes of individual farmers improved further in 1957 and 1958. This partly reflected increased incomes from the sale of animals for slaughter.

For consumers, the outlook suggests supplies will be ample to meet their demands at something approximating this year's level of retail prices.

Year-to-year changes in consumers' purchases of dairy products customarily have been very small. But over time they add up to thoroughly penetrating, powerful influences on the dairy industry. As expressed in prices through marketing channels and back to farmers, they have a bearing, not only on level of total milk output but also on the areas where milk is produced and in pattern of use among products. Many of these shifts stem from alteration in consumers' preference patterns, aside from any consideration of income. Thus they are not predictable in the sense that some of the effects of measurable economic magnitudes may be forecast. However, we probably can expect some further long-term declines in use of milkfat in some products, while at the same time getting increases in consumption of milk solids-not-fat. In 1958, consumption of milkfat at 27 pounds per person was 12 percent below the level of 15-20 years ago. On the other hand, use of milk solids-not-fat per person, at nearly 50 pounds, was about 25 percent above levels of two decades ago.

At times the shifts in consumer tastes and preferences seem to overshadow influences of prices and incomes. But the accompanying table illustrates that prices and incomes still have some effects on consumption. These are in the form both of direct effects on the products and indirect effects through other products. In 1958, for instance, you will note the sharp rise in cheese use seems to be associated with the rise in meat prices, since both retail cheese prices and consumer incomes were essentially unchanged from 1957. In 1959 pork prices are likely to decline, but beef prices are expected to stay high compared with cheese prices.

Value and consumption per person and unit cost of specified foods
compared with consumer income, United States, 1957,
and 1958 as a percentages of 1947-49

Item	Value	Consumption	Unit cost to
	per capita	per capita	consumers
	1/	2/	3/
	:	:	:
	Percent	Percent	Percent
	1957	1958	1957
Beef and veal	129	137	124
Pork (excluding lard)	91	96	88
Lamb and mutton	93	99	85
All meats	110	117	107
Eggs	77	78	93
Chicken	107	120	137
Fluid milk and cream	122	123	97
American cheese	107	123	98
Evaporated milk	77	76	72
Butter	75	75	79
Margarine	115	120	154
Fruits and vegetables	114	120	97
Potatoes	103	117	95
Cereals and bakery products	118	118	91
All foods (including meals away from home)	117	121	102
Disposable income, per person			143
			143

1/ Values per person for all livestock products and for margarine are based on product of quantity consumed by civilians times average cost per unit. For other items and for all foods, indexes of per capita values are products of indexes of prices times indexes of civilian consumption. This multiplication of index numbers partly accounts for the fact that the rough estimates given above differ from estimates of food expenditures as published by the Department of Commerce. Such a method does not reflect shifts in consumption within food groups or increases in processing and service costs connected with larger movements of food through restaurants and hotels. Moreover, the Commerce series includes some items not included in the above table.

2/ All data are comparable with those carried regularly in the National Food Situation except for eggs and chicken, which are given in primary distribution weight in this table instead of retail weight; only American cheese is used here instead of all whole milk cheese; the index of fruits and vegetables used here includes sweetpotatoes, dry beans, and peas in addition to those items regularly carried in the Food Situation index.

3/ For all livestock products consumed from farm marketings, average retail prices published in the Marketing and Transportation Situation were used. In addition, for eggs, chicken, milk, and butter, quantities consumed on farms were valued at prices received by farmers for those items. For margarine and remaining items, indexes were published by or worked up from Bureau of Labor Statistics data.

4/ Averages based largely on price data for first 3 quarters.

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UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

THE OUTLOOK FOR EGGS AND POULTRY IN 1959

Statement to be presented by Edward Karpoff at the
36th Annual Agricultural Outlook Conference,
Washington, D. C., November 20, 1958

In 1959 there will likely be increased production of eggs and broilers, and perhaps of turkeys also. For eggs, the increased number of potential layers already on farms practically assures a monthly output larger than a year ago through at least mid-1959, and probably for the remainder of that year also. For poultry meat the prospects for increased production are less certain, because most of the birds to be produced next year are not yet hatched. However, the large number of breeder birds already on hand and in prospect, and the long-time trend of expansion in poultry meat production, suggest that 1959 broiler production will be larger than in 1958. Turkey output may be up somewhat too.

Prices for eggs and broilers are likely to average lower than in 1958. Through September of the year now closing, egg prices were noticeably higher than the year before and relatively favorable to producers. Since then, egg prices have been lower than 12 months earlier, and are likely to continue lower for 6 or 8 months. By the end of 1959, however, they may exceed comparable 1958 prices if, as expected, there is a moderate cutback in the number of chickens raised for laying flock replacement in 1959.

Broiler growers cannot hope for as favorable prices in early 1959 as they enjoyed from January through June 1958. At that time, you remember, broiler marketings were delayed and reduced by both a harsh winter in the Southeast and by losses from improper feedstuffs. At that time, also, red meat prices to consumers were relatively high. These factors raised broiler prices to a degree unlikely to be repeated in 1959. Even if broiler prices in the last half of 1959 are the same or slightly higher than in 1958, average prices for the year as a whole will be lower.

Turkey prices in 1958 will probably average a shade higher than in 1957, with the effects of the slightly smaller crop being about balanced by the larger storage stocks. If 1959 turkey production is as expected, about the same as in the year now ending, prices won't be much different either.

The potential for increased egg production is established by the 3 percent increase from last year in the number of potential layers recently on hand. This increase would have been even larger, were it not for the fact that the 1957-58 laying flock contained an unusually large proportion of aged layers which have now been sold off. With the addition of pullets, the laying flock will be slightly increased over this year and is going to produce at a higher rate per bird. Monthly egg supplies will therefore exceed the year before throughout the period when flock size is closely related to January 1 layer numbers. Later in the year when flock size more closely reflects changes in the number of chickens raised, the influence of increases in rate of lay will become more prominent. Even if the flock then is reduced slightly, total monthly egg production in the final quarter of the year will probably be slightly above 1958.

If this pattern materializes there will be a more pronounced seasonal pattern to 1959 egg production than the fairly level monthly pattern of 1958. This would probably induce wider price swings from spring to fall than in 1958, which could result in improved egg prices at the end of the year.

If egg handlers anticipate greater than usual seasonal change in egg prices, as would occur under these conditions, they will be interested in storing more shell eggs in the spring of 1959 than the record low number stored this year. Such a price development would also favor slightly greater storage of frozen egg than in 1958. These storage demands help to set a floor under springtime egg prices.

If egg prices are in fact lower next spring, as they are now lower than a year earlier, I think farmers' inclinations will be to raise fewer replacement chicks. Declines in feed prices are unlikely to offset more than a small part of the egg price declines that are expected, and the egg-feed price ratio, a measure of the returns from the enterprise, will be below the spring before.

An extension of the same reasoning which leads me to expect fewer chickens raised might also lead to expectations for a smaller broiler production, but this is not the case. Broiler production will probably increase further in 1959, although probably not at the 15 percent rate that we are having in 1958. The decisions about volume of broiler production are not made by many small farmers, each looking at his current economic status and making his judgments accordingly. The decisions are made by a much smaller group of entrepreneurs, who may be called contractors, financiers, or integrators. In their drives to cut unit costs, they find that increased volume, which spreads overhead charges, is to each individual one of his most promising adjustments.

The result is a constantly burgeoning broiler production. Right now, for example, with prices in the last 3 months respectively 13, 8, and 7 percent below the year before, most weekly chick placements in recent weeks have run 8 to 12 percent above last year.

Part of the declines in broiler prices in the last few years have been offset by lower costs due to greater production efficiency. Nevertheless, the result is that even the integrated enterprise is less profitable now than 4 or 5 years ago, on a per-bird basis. But, the pressures inherent in the large-scale pro-

duction organization tend toward larger volume and at the same time, with applications particularly for early 1959, there is a large prospective supply of hatching eggs to be available. In the last 5 months primary breeders' sales of hatching eggs and pullet chicks for broiler hatching egg production have averaged about 50 percent above the year before. This indicates a large number of chicks to be available (although not fully up to the percentage increase noted for the breeding stock), and possible lower prices for chicks. Feed supplies likewise will impose no barrier to increased production.

With more nearly normal weather and no feed irregularities, compared with early last year, and with expected larger supplies of pork, broiler prices in the first half of 1959 are likely to be below the 20-cent average of January-June 1958. This expectation for lower prices is also influenced by the fact that consumers have become accustomed to low-priced chicken in the last few months.

Later in 1959, if the broiler industry limits its output in response to low prices, production may still exceed this year, but by a smaller margin. But if prices should rise even briefly to a level that makes production as profitable as in early 1958, the volume of output can be increased so rapidly that sustained prices averaging much over 20 cents per pound are very unlikely, except possibly during the summer.

The same financing arrangements that govern broiler production are becoming important for the hatching, rearing, and marketing of turkeys. For this reason the usual production-cutting influences of low prices--such as 1957 and 1958 prices--will be dulled in their effects upon prospective 1959 production. Turkey prices this year will average only a little above the 23.4-cent average of 1957. The price of that year helped to induce a 4 percent cut in 1958 output. This year the downward pressure of price may be offset by the reported widening influence of integration. Therefore, it would be unrealistic to expect that 1959 turkey production would decline from 1958, nor are substantial rises likely in 1959 average turkey prices compared with 1958.

But there are some indications to the contrary. Current hatchings produce turkeys to be slaughtered in the first few months of 1959, and hence will contribute to that year's production. These hatchings are more than 50 percent above last year. Fortunately, October and November hatchings are a very small part of each year's total turkey production, but an October 1 survey of the intentions of farmers who keep breeder turkeys revealed plans to keep 38 percent more light-weight turkey breeders and 7 percent more heavy breeders than last year. However, owners of turkey breeder flocks are still in a position to alter their production plans. But if their initial intentions are carried out or if hatchings continue into the middle of the spring with the same increases above last year as have been shown in the last few months, the 1959 turkey situation will be very difficult.

One of the reasons that the slight production decrease this year is having only a scant effect upon prices is that the turkey storage stocks, both at the beginning of 1958 and now, are at record levels for the respective seasons. At their peaks the stocks have amounted to more than 20 percent of the crops from which they were drawn.

Another influence upon current turkey prices is the uneven distribution of this year's turkey hatchings; poult hatched in months that affect November and December slaughter were more than last year, despite the cut in poult production for the year as a whole.

All of the foregoing adds up to continued large production of each of the major poultry products, the maintenance or increase of per capita supplies of each of them, and, in general, lower prices to farmers for the output. In the years to come, with the pressure of larger production probably outrunning increased requirements stemming from either larger population or the upgrading of diets, such pessimistic forecasts are likely to be frequent features of the poultry outlook.

Statement presented by George W. Kromer
at the 36th Annual Agricultural Outlook Conference
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The outlook for fats and oils in the 1958-59 marketing year is influenced largely by the record supplies of edible fats, oils, and oilseeds. Supplies of all oilseeds and peanuts are abundant and farm prices in 1958-59 are likely to average near support levels, but below a year ago.

Beginning stocks of food fats (including oil equivalent of soybean carry-over) on October 1, 1958 were somewhat larger than a year earlier and output is up sharply. Prospects are that the total supply of edible fats, oils and oilseeds in 1958-59 will be about 15 percent greater than the 11.7 billion pounds (oil equivalent of oilseeds) for the year just ended.

With availabilities of food fats (including oil equivalent of oilseeds) in 1958-59 well in excess of domestic requirements, a large buildup in soybean stocks will take place despite a heavy export movement of food fats and oils and soybeans. Present indications are that exports of food fats through September 1959 may be somewhat larger than the 2.6 billion pounds moved out last season but below the 2.9 billion shipped abroad in 1956-57.

A heavy export movement of edible oils from the U. S. is expected to result from another large P. L. 480 program, which probably will exceed last year's 690 million pounds. About 160 million pounds of exports under P. L. 480 in 1958-59 will consist of programs carried over from last year compared with only 45 million pounds a year earlier. As new P. L. 480 programs in 1958-59 are expected to call for at least as much edible oils as last year, the level of exports will be in part determined by the percentage of program oil that is shipped prior to October 1, 1959. Exports financed by ICA are not likely to be large, and regular commercial sales for export probably will do well to hold the 1957-58 level. Total exports of edible oils are currently forecast between 1,100 and 1,300 million pounds compared with 1,053 million last year. The level of our edible oil exports, soybean crush and stocks in 1958-59 could be affected by CCC's policy, not yet announced, with respect to the disposition of any cottonseed oil acquired under the support program.

The U. S. will again face stiff competition from foreign supplies in 1958-59. World production of fats and oils probably will rise about 5 percent, although most of the increase is taking place in the U. S. Exportable supplies of peanuts from Nigeria and French West Africa will be about as large as a year ago. The 1958 Mediterranean olive crop is expected to be slightly smaller than a year earlier. Output of soybeans in China, sunflowerseed in Russia and coconut oil in the Philippines are all expected to be somewhat higher during the 1958-59 marketing year. Rapeseed production in Europe and Canada probably will continue at about the same level as last year.

Now let us look at the prospects for individual commodities.

The 1958-59 supply of soybeans is placed at 596 million bushels, 106 million more than last year's peak. Farm prices during the 1958 harvesting season are averaging a little under the support rate of \$2.09 per bushel.

Prices later in the season likely will return to the loan level but probably will not exceed it by any significant margin. The seasonal variation in soybean prices in recent years has been less pronounced than formerly. This was due mainly to a situation wherein the rate of expansion of production was greater than market outlets. As a result, storing beans looking for recovery from the harvest-time lows has not been so profitable as in earlier years. The record quantities stored this year, however, has prevented harvest-time prices from falling below support by a wider margin.

Demand for soybean meal is expected to continue generally favorable in 1958-59 and is likely to be the most important determinant in the level of soybean crushings. In the past, oil was usually considered the main factor as demand has increased for the ever-increasing output of meal. Based primarily on the projected requirements for soybean meal, the 1958-59 soybean crush is forecast at around 375 million bushels, roughly 20 million more than last season, and well within the estimated 425 million bushel capacity of the industry.

Domestic demand for soybean oil in 1958-59 is expected to continue strong but will face increased competition from larger supplies of lard and cotton-seed oil. The competition from cotton oil will be reduced to the degree that it is acquired by CCC and withheld from the domestic market. For this reason, domestic use of soybean oil probably will remain at or above the 1957-58 record level of nearly 3.1 billion pounds. Therefore, it appears that a bean crush of 375 million bushels would produce from three-quarters to one billion pounds of soybean oil in excess of domestic requirements, and this would become available for export or carryover stocks.

Present indications are that soybean oil prices, as of other food fats, during the 1958-59 marketing year will average moderately lower than a year earlier. Soybean meal prices are expected to be more stable than in 1957-58 and probably will average somewhat lower.

Soybean exports, continuing the uptrend of recent years, are forecast at 90 million bushels, about 4 million above 1957-58. If seed and feed requirements are about the same as last year and crushing and export estimates are reasonably accurate, carryover stocks of soybeans on October 1, 1959 would be about 100 million bushels, compared with 21 million this year. A large part of these would be in the hands of CCC.

Soybean acreage in 1959 will be affected by such factors as the outcome of the corn referendum to be held November 25, 1958, the extent to which cotton producers participate in the plan allowing them to plant excess acreage of cotton in 1959 above their allotments, and the discontinuance of the Acreage Reserve Program for corn, cotton, and other basic crops beginning in 1959. Another important factor in 1959 acreage will be the level of support for soybeans. Supports have generally moved downward from the high of 1952 as production has expanded. Price support for soybeans is discretionary with the Secretary of Agriculture. No announcement as to support for the 1959 crop has been made as yet.

It seems likely that any extension of cotton or corn acreages that materializes would tend to arrest the recent uptrend in soybean acreage, and might reverse it. A repetition of 1958 record yields also is unlikely. The most probable expectation therefore is for the soybean crop to be reduced somewhat next year.

The 1959 crop nevertheless is likely to be very large as measured against earlier standards. Because of the sizable carryover of 1958-crop beans that will be on hand next October 1, the total supply very probably will be a new record.

Cottonseed production in 1958 is placed at 4,864,000 tons, nearly 6 percent more than a year ago. Cotton acreage is down sharply this year because of heavier participation in the Soil Bank program but cotton yield per acre is record high. Prices to farmers are expected to average a little above the support price of \$41 per ton (CCC purchase price to producers, basis grade, 100) and about \$5 to \$10 below last year. Farm prices in some areas of the Southwest dropped below support this fall and CCC is acquiring some cottonseed oil through arrangements whereby crushers are taking seed at support and delivering oil to CCC on a competitive bid basis. The volume of oil acquired by CCC under the program this year probably will not exceed 15 percent of the 1958 cotton oil output.

Cotton oil prices this fall and winter are likely to continue below last year, but relatively more stable, as prices a year earlier were rising during this period. Oil prices for the entire 1958-59 season probably will average somewhat lower than last year. Disappearance of cottonseed oil will be affected by CCC disposal policy for oil it acquires. Heavy supplies of competitive soybean oil and lard at lower prices will tend to exert downward pressure on cotton oil prices. The premium of cotton oil over soybean oil during the 1958-59 marketing year is expected to be slightly narrower than last year.

The Secretary of Agriculture proclaimed a national marketing quota of 12,167,000 bales of upland cotton for the 1959 crop and a national acreage allotment of 16,000,000 acres, the legal minimum allotment under the Agricultural Act of 1958. In addition, a national acreage reserve of 310,000 acres will be apportioned to small farms to maintain minimum farm allotments. A growers' referendum on the 1959 quotas will be held on December 15, 1958.

Cottonseed production in 1959 probably will increase somewhat because most of the 5 million acres placed in the Soil Bank in 1958 will be back in production. Furthermore, the extent to which cotton farmers participate in the excess acreage plan will tend to increase acreage over the allotment of 16.3 million. Unless an unfavorable growing season should result in yields below average, production would be the largest since 1953.

Lard output in 1958-59 is forecast at 2,700 million pounds, up over 250 million pounds from last year. Lard prices this fall and winter may not average much less than in 1957-58. However, lard prices in the second half of the marketing year probably will average lower. Exports of lard may rise slightly from the 457 million pounds shipped abroad last year.

Lard output in 1959-60 probably will increase 8-10 percent following a sharp rise in 1959 hog production. In such a case, lard prices would be appreciably lower than in late 1957 and 1958.

Domestic disappearance of food fats and oils in 1958-59 is expected to average close to the year-earlier rate of 45 pounds (fat content) per person. The pattern of consumption by end use is expected to roughly parallel that indicated for 1957-58. During 1957-58, the apparent use of margarine, shortening, and salad and cooking oils was above the rate for 1956-57. Margarine use per person set a new record in 1957-58 while butter remained about the same as the previous year.

Flaxseed production in 1958 is indicated at 40 million bushels, 55 percent larger than the small crop of 1957. The crop is likely to be about 25 percent more than probable commercial uses and CCC probably will acquire the surplus. Farm prices have moved downward this marketing year and currently are under the support price. The season average farm price will be slightly less than the support price of \$2.78 per bushel and well below the \$2.94 per bushel received last year. Linseed oil prices in 1958-59 are likely to average well below a year earlier. Although some pickup in demand from the drying oil industries is likely, the availability of large supplies is expected to hold prices below a year earlier.

The outlook does not appear favorable for large commercial exports of U.S. flaxseed in the 1958-59 marketing year. Large exportable supplies of linseed oil are likely in Argentina and of flaxseed in Canada. However, some commercial exports of U.S. flaxseed may take place because of the demand for seed for crushing. About 55 million bushels may be available for export as seed or oil from foreign countries alone. This will be near the average of total world exports in recent years including large shipments from the U. S.

Supplies of tung oil in the 1958-59 marketing year are placed at around 96 million pounds, 21 million more than last year. This would be enough tung oil to satisfy domestic requirements for two years at current consumption levels. Tung oil prices to producers will average near the support level which is a little higher than last year. Large carryover stocks (mostly in the hands of CCC) along with the oil likely to be imported under the quota and the bumper 1958 crop will keep prices from rising above the support level during the marketing year.

Inedible tallow and grease output in 1958-59 is forecast at 2,800 million pounds, about 3 percent above a year earlier. Prices in 1958-59 may average a little lower than last year. The strength of export demand will again be an important price-making factor as little change in domestic disappearance is expected.

The 1958 peanut crop is placed at 1,886 million pounds compared with 1,445 million produced in 1957. The 1958 crop will provide a large surplus of peanuts above food and farm uses and CCC will acquire the excess under the support program. Prices to farmers are expected to average slightly less than the 10.3 cents per pound received last year, reflecting a 4 percent reduction in support price. Bigger supplies of peanuts available in the 1958-59 season along with somewhat lower prices will encourage the continuing increase in consumption for edible uses. Nevertheless, diversion of CCC peanuts into crushing and export channels during the coming year will be much heavier than a year earlier.

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Agricultural Marketing Service

OUTLOOK FOR FEED IN 1959

Talk by Malcolm Clough,
Agricultural Economics Division
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The one dominant feature in the feed outlook for 1958-59 is the big supplies of all types of feeds. The 1958 growing season was one of the best in years for feed crops being uniformly good to excellent in nearly all areas of the country. High yields were attained for all of the feed grains and forage crops. The total supplies of feed grains, high-protein feeds and hay for 1958-59 are all bigger than in any previous year. Because of these big supplies, feed prices are expected to average a little lower during the coming year.

Total feed concentrate supplies have increased sharply during the past 2 years following a more moderate increase during the period 1952-56, reaching a record level of over 240 million tons. This is the sixth year of increasing feed concentrate supplies and the fifth year of record supplies. The increase during this 6-year period was due both to mounting stocks and increasing production.

Total utilization of feed grains and other concentrates also has trended upward in recent years. But, it has failed to keep pace with production. It was below production by 3 to 7 percent in each of the years from 1952-53 through 1957-58. In 1958-59, it is expected to fall short of this year's big crop by around 10 percent. Feed prices have been low in relation to livestock prices during the past year or so and livestock production is increasing. An increase of around 4 or 5 percent in the tonnage of feed consumed by livestock is in prospect for 1958-59. Exports probably will continue at around the record 1957-58 rate of 10 million tons.

Even allowing for this heavier utilization, the carryover of feed grains is expected to make a sharper increase during 1958-59 than in other recent years. The total carryover next year is expected to reach a record of around 75 million tons, a fourth larger than the carryover into 1958-59. Stocks carried over outside of the price support program have been comparatively stable at around 8 or 9 million tons in recent years. Again practically all of the increase in carryover is expected to be in Government stocks.

High per-acre yields of feed grains in the last 3 years have been important in boosting feed grain production and stocks. The near record yield per acre of feed grains in 1956 was followed by record yields in 1957 and 1958. Influenced by a very favorable growing season, record yields per acre were realized for each of the four feed grains this year. The very high yields of corn and sorghum grain also reflect the increasing use of fertilizer, expansion of irrigation and wider use of hybrid seed.

Not only are feed concentrate supplies large this year, but the 1958 hay crop was nearly equal to the record crop of last year and total hay supplies are the largest of record. Supplies of forages are well distributed by areas, being above average in all regions of the country. The 1958 growing season also was favorable for pastures and ranges, which have furnished much more than the average quantity of feed for livestock this year.

The total supply of high-protein feeds is expected to continue its long-term upward trend in 1958-59. Much of the increase in high-protein feed supplies over the past 20 years has been in soybean meal. Larger supplies of soybean meal, cottonseed meal and animal proteins are in prospect in 1958-59.

The 1958-59 corn supply exceeds 5 billion bushels for the first time. It is more than 300 million bushels above the previous record supply of last year, and more than a billion bushels above the 1949-53 average. The 1958 crop exceeds the 1948 record and the carryover of corn is more than double the 1949-53 average. The resulting supply is much more than ample to take care of prospective domestic use and exports. While the increasing livestock population is expected to consume more corn in 1958-59 than in 1957-58, the increase may be comparatively small since the 1958 crop is of better quality than the 1957 crop, and larger supplies of other feed grains are on hand. The big 1958 crop is expected to boost carryover into 1959-60 by around 300 million bushels, or to a total of nearly 1.8 billion bushels.

Combined supplies of the other 3 feed grains have increased more sharply than corn during the past 2 years. The sorghum grain supply of over 900 million bushels this year is more than 3 times the supply of only 2 years ago. The sorghum grain supply now exceeds barley in total tonnage and is nearly equal to the total tonnage of oats. Big supplies of oats and barley also are on hand for 1958-59. Record carryover stocks of each of these three grains are in prospect for the close of the 1958-59 season.

Feed grain prices are expected to average a little lower in 1958-59 than in 1957-58, reflecting larger production and a slightly lower level of Government price supports. This winter, prices may average

near last year's level, but they probably will be lower next spring and summer than in 1957-58 when they advanced more than seasonally. Declining feed prices during the past 2 or 3 years have been accompanied by generally rising prices of livestock and livestock products. Feed prices were low relative to prices of livestock and livestock products during 1957-58. Livestock-feed ratios are expected to continue generally favorable to livestock producers in 1958-59.

Corn prices this winter may average close to the level for the same period of a year earlier. While the crop is larger it also is of much better quality than last year, and prices will not be depressed as they were last year by the large marketing of high moisture corn during the period from November through February. This year corn prices may recover more quickly from the November low, but the seasonal rise in the first 6 months of 1959 probably will be much less than the 28 percent rise in prices received by farmers from January to June, 1958.

High-protein feed prices are expected to be more stable in 1958-59 than in 1957-58, but they probably will average a little lower. High-protein feed prices may average a little higher this fall and winter than last, but are not expected to increase as much later in the feeding year, averaging below the high 1958 level during the spring and summer of 1959.

Over the next several years, the outcome of the November 25 referendum of corn producers, the big stocks of feed grains now on hand and trends in feed grain yields and utilization will all play important roles.

If the majority of producers voting favor the new program, the commercial area will not be established in 1959 and the support price will be based on 90 percent of the average price during 1956, 1957 and 1958--or around \$1.12 to \$1.15 per bushel. Should corn producers vote to continue the present program, the acreage allotments will be established and supports to complying farmers probably will be close to 75 percent of parity. The acreage allotment for 1959 would probably be about 33 million acres, 15 percent below the 1958 allotment.

The big stocks of feed grains that will be on hand for 1959-60 and the years that follow dominate the outlook for feed grains over the next few years. They will play a major role in the over-all feed situation whether we have years of short crops, or average or better than average crops.

Comparisons are shown here as to how these stocks measure up to average production, the feed required by our annual pig crop and the deficit resulting from a severe drought year. In these comparisons, allowance is made for what might be considered a "normal" carryover. The stocks above "normal" stocks may be considered as available for use

without reducing carryover to an undesirably low level. It is not the intention here to imply that these are entirely surplus stocks. They may turn out to be, at least in part, a desired reserve, depending on circumstances of the next several years. For the purpose of these comparisons, the normal carryover is taken as 20 million tons. The 75 million tons carryover in prospect for 1959-60, less the 20 million tons allowance for "normal" carryover, would leave prospective stocks above this "normal" of about 55 million tons.

These above-normal carryover stocks of 55 million tons would be 43 percent of the 1953-57 production. They would be sufficient to fully make up for the deficit of a very unfavorable season such as 1936 or 1947 and still leave at least a "normal" carryover at the close of the year.

The 55 million tons of feed grains above "normal" stocks would be 40 percent of the annual feed concentrates consumed by livestock or would take care of our present livestock requirements for about 5 months of the feeding year. They would provide for a 10 percent increase in the current level of feeding over a period of 4 years. In terms of feed required for producing our pig crop, these stocks would be a little more than the 52 million tons of feed estimated as required to produce our combined spring and fall pig crops of recent years.

Our stocks loom very large in relation to our annual exports. While increased exports have proved an outlet for substantial quantities of our surplus feed grains, they have been a relatively minor outlet, compared with the total tonnage now on hand. Carryover stocks above the "normal" level are nearly 6 times the record exports of 10 million tons for 1957-58.

Over a longer period, trends in feed grain yields per acre could have a significant effect on the acreage-production-utilization balance. During the past 20 years, (based on a 5 year moving average) yields of feed grains per acre have increased nearly a third while feed grain acreage has made no net increase since the late 1930's. Since we are consuming more livestock food products per person, livestock production also has gone up faster than population. Even so, we have produced more feed grains than have been needed to keep pace with expanding requirements.

To assume these trends would continue over the next 15 or 20 years would be an oversimplification of the longer term outlook for feed grains and livestock. It is of interest to note, however, that an extension of these trends would indicate that population and per capita consumption of livestock food products may continue to increase during the next two decades without requiring an increase in feed grain acreage, because of the steadily increasing yields per acre.

Agricultural Marketing Service

THE OUTLOOK FOR FOOD IN 1959

Statement presented by Harry Sherr
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The food outlook for 1959 can be summarized briefly. Supplies are expected to be somewhat heavier than in 1958. Consumer demand for food will likely continue strong. Food consumption per capita probably will average slightly higher than estimated for this year, but around an eighth above the prewar (1935-39) average. Retail food prices are expected to average a little under the record high level reached in 1958.

First, a review of the demand prospects for food in 1959. Expectations are that economic activity and employment will be higher than in 1958. With wage rates likely to advance further, consumer income probably will be at a record level, up noticeably from this year. Consumer outlays for all goods and services are expected to be somewhat higher than in 1958. The probable small increase for food will reflect mainly the larger population and the continued increase in the amount of services purchased with food. The proportion of income spent for food will likely be a little lower than indicated for 1958 since the increase in income will be relatively greater than that of food expenditures.

The expectation that retail food prices will average a little lower next year than in 1958 is based on the likelihood of larger supplies and lower prices to farmers for hogs and -- at least during the early part of 1959 -- poultry products, fresh vegetables and potatoes. As usual, prices will vary during the year, reflecting seasonal differences in supplies. Part of any reduction in farm prices for some foods will be absorbed by the expected further increase in processing and marketing costs. Retail food prices in 1958 were record high, reflecting the somewhat smaller supplies of meat, fresh and processed citrus fruit and, in the early part of the year, fresh vegetables. Outlays for food were maintained at a high level despite lower average income per person during at least the first half of the year.

Now for a longer look at the food supply and consumption prospects for next year. Expectations are that food supplies will be larger than in 1958 because of heavier stocks at the beginning of the year and, if weather is average, large food crops. There will be more livestock on farms and ranches this January 1 than last.

Civilian consumption of meat is expected to be moderately above the rate of 152 pounds per person estimated for the present year. The prospective increase will be almost entirely in pork. Beef consumption will almost equal the 1958 rate. Some increase in canned meat is probable, continuing the long-term upward trend.

Pork consumption in 1959 may reach 66 pounds per person, almost 10 percent above this year's low rate. The increase over 1958 will begin in late winter. From then to about early summer, supplies will be from the 1958 fall pig crop, which is estimated to number 14 percent more than that of 1957. After early summer, pork supplies will be mainly from the 1959 spring pig crop. This crop also is expected to be substantially larger than the year-earlier one. Pork prices are expected to fall sharply early in 1959 to below the year-ago level, and to average lower than in 1958 during the remainder of the year. The anticipated reduction in pork prices will likely be enough to bring the average price for all meats a little below those of 1958.

Civilians are expected to have almost 80 pounds of beef per person next year, close to the rate for 1958. Supplies will be a little larger next year, but the civilian population will be up proportionately more. The small rise in beef output reflects the effect of the continued build-up of breeding stock. There will likely be a relatively high proportion of the better grades in the beef supply in 1959 too, as cattle slaughter is expected to include relatively more grain-fed animals but fewer cows and grass-fat cattle.

Supplies of milk and other dairy products will continue plentiful in 1959. Stocks will be lower this January 1 than last. Milk production may exceed by a little the 126.1 billion pounds indicated for 1958, and may be more nearly in balance with consumption of commercially marketed milk products than it has been in any year since 1952.

Consumption of milk and other dairy products per person is expected to be about the same next year as in 1958 -- around 75 pounds, in terms of total milk solids. Small differences for individual items are a possibility. Retail prices of dairy products are likely to average near those of the present year.

Prospects are for more poultry meat and eggs than in 1958, particularly in the first half of the year. For chicken meat the increase will reflect both greater output of commercial broilers and increased sales of mature chickens from the expanded farm flocks. More turkey meat is probable because of the likelihood of a larger-than-usual number of birds available for slaughter next January-June, and January 1 cold-storage stocks equal to or even greater than the year-earlier record total. Indications of a somewhat greater number of chickens in the nation's egg-laying flock this January 1 than last points to heavier output of eggs than in 1958 at least during the first 6 to 8 months. However, the civilian population will be up too, so consumption of eggs per person may number close to the 348 estimated for 1958. Poultry meat consumption next year may top slightly this year's record rate.

Edible fats and oils will be in much heavier supply than in 1958. The increase will be in lard and the major vegetable oils. Civilian consumption of food fats and oils products in 1959 is expected to be close to this year's rate of 45 pounds (fat content) per person. Retail prices of these products may average a little lower than in 1958, reflecting in part lower prices for the raw materials.

Supplies of most food grains will be record high next year, and much in excess of anticipated domestic needs and exports. Civilian per capita consumption of cereal food products probably will be no higher than in 1958. Retail prices of these food products will likely average a little higher next year because of the prospective continued increase in processing and marketing costs.

For fruits and vegetables we cannot look farther ahead than next spring with much confidence in our forecasts. Supplies of most commercially processed items are adequate to maintain consumption by civilians during the remainder of the present marketing year (which ends around mid-1959) close to the year-earlier per capita rates even though stocks of a number of items are below the year-ago high levels. Citrus products are the outstanding exception. Supplies will be less than adequate until the new packs start moving to market in volume after January 1. More fresh apples but fewer pears will be available in the first part of 1959. Fresh citrus will be in heavier supply next winter and spring than last, according to early-season indications. Substantially more fresh vegetables will be available next winter than last if weather is normal. Unfavorable weather last winter severely damaged the vegetable crop and in Florida also sharply reduced citrus production. Imports this winter will supplement supplies of fresh vegetables.

Potatoes are expected to continue in heavier supply and to be lower priced than a year earlier through most of the winter. The heavier supplies in the months ahead come from the substantially larger crop harvested this fall than last.

Military purchases of food in 1959 are expected to be about as large as this year, but exports will be up some. The increase will be in foods which are in very heavy supply -- these include wheat, rice and the vegetable oils and oilseeds.

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AGRICULTURAL MARKETING SERVICE

THE OUTLOOK FOR FRUITS AND TREE NUTS IN 1959

Statement by Ben H. Pubols,
Agricultural Economic Statistician,
at the 36th Annual Agricultural Outlook Conference,
Washington, D. C., November 19, 1958

TRENDS IN THE FRUIT ECONOMY

A look at some of the trends in the fruit economy since 1935 should be helpful in appraising the outlook for fruit in 1959 and a few years beyond. Since 1935, total production of fruit has increased about one-third, reaching a level of approximately 18 million tons. Nearly all of the increase was in citrus fruits, production of which about doubled. Production of noncitrus fruits showed little trend over these years, though often fluctuating considerably from year to year. In recent years, noncitrus was still more than half of the total tonnage of fruit.

Cold weather in Florida and dry weather in California in 1957-58 interrupted the upward trend in production of citrus fruits. Although production in 1958-59 in California probably will approach the level of recent years, that in Florida is expected to be somewhat smaller because of continuing effects of the 1957-58 freeze. Assuming further recovery of citrus groves in Florida and continued resurgence of production in Texas, total production of citrus fruit can be expected to trend upward again but at a lower level than would have been the case had the freeze in Florida not occurred. This assumes upward trends in production of oranges in Florida and Texas, and an upward trend of grapefruit in Texas.

Although the level of production of deciduous fruits has not changed greatly since 1935, there have been differences in trends among important individual fruits. Trends have been up for plums, sour cherries, nectarines and cranberries, but down for prunes and apricots. For sweet cherries, grapes, peaches and pears, production trends were up during the early years of the past 2 decades, then level or down. For apples, the trend has been down, then level, and for strawberries down, then up. Although the trends of the recent past of most of these fruits are likely to continue for the next few years, the level of total production of deciduous fruits probably will not change much.

Utilization of citrus fruits, both fresh and for processing, increased from 1935 to 1945. Since then fresh use declined but total use for processing continued sharply upward. Use for frozen citrus concentrates, especially orange concentrate, surged upward, while use for canning declined. Although use for frozen concentrate was set back in 1957-58 by freeze damage to the Florida crop, this use is expected to start upward in 1958-59 and continue larger in following years as

citrus groves recover in production. Use for processing took about 55 percent of the United States citrus crop in 1956-57 and about 57 percent in 1957-58.

Concerning utilization of noncitrus fruits since 1935, a slight downward trend in fresh use has been about offset by a small upward trend in amount processed. Use for canning and freezing increased, while that for drying decreased. These trends are likely to continue over the next few years. Use for processing took 60 percent of the 1956 crop and 55 percent of the 1957 crop.

Since 1935, per capita consumption of fresh and dried fruits has declined, that of canned fruits and juices combined has increased until 1946, then declined somewhat as that of frozen fruits and juices increased sharply. These trends are likely to continue over the next few years. Per capita consumption of all fruits combined, fresh weight basis, increased from about 178 pounds in 1935 to about 228 pounds in 1946, then declined to a level of about 200 pounds beginning in 1949 and extending to the present. However, total consumption has increased because of the increase in population. Further growth in population is expected to continue as a strong force in further increases in total consumption.

OUTLOOK FOR 1959

During the first half of 1959, supplies of fresh fruit probably will be heavier than in the first half of 1958 because of larger production of citrus fruits. But supplies of most processed fruits are expected to continue smaller. As usual, domestic supplies of fruit will be augmented by large receipts of offshore supplies of bananas and canned pineapple and pineapple juice and smaller supplies of other items. Consumer demand for fruit in the United States in 1959 is expected to be at least equal to that in 1958. World demand for fruit remains good.

Export Outlook

The export outlook for United States fruit in 1958-59 is marked by higher levels of purchasing power and gold and dollar holdings than a year ago in most European countries, the destinations of a large volume of U. S. exports. Moreover, import conditions in the British market are more liberal than they were last year. On the other hand, deciduous fruit crops in Europe this year are much larger than the poor crops in 1957, and production of citrus fruits in the Mediterranean area in 1958-59 is expected to be heavier than in 1957-58. The net effect probably will be some reduction in total exports of fresh fruit. But exports of canned and frozen fruits and juices are likely to increase.

Citrus Fruit

Prospective production of citrus fruits in 1958-59 is up from 1957-58, and production may increase further in 1959-60. The 1958-59 crop of early and midseason oranges (as estimated October 1) is slightly larger than the reduced 1957-58 crop and about 9 percent larger than

the 1947-56 average. Increases in California and Texas more than offset decreases in Florida and other States. The Florida tangerine crop is nearly double the reduced 1957-58 crop. On October 1, 1958, prospective production of Valencia oranges in Florida was up 14 percent from 1957-58, and in California prospects for the Valencia orange and lemon crops were more favorable than a year earlier.

Production of grapefruit in 1958-59 is expected to be moderately larger than the 1957-58 crop, which was reduced sharply by the freeze. Increases over last season are indicated for Florida and Texas, and decreases are indicated for Arizona and California.

Harvest of the new orange and grapefruit crops in Florida started several weeks later this fall than last fall. Fresh market shipments during October lagged behind those of a year earlier. Prices for early-season sales were much higher than a year ago, and although prices have declined with increasing shipments they have continued higher than year-earlier levels.

Demand for citrus for processing as well as for fresh use is expected to continue strong this fall and winter. In Florida where most of the freezing and canning of citrus products is done, packers' stocks are much lighter than a year ago, and some further reduction in stocks, especially of frozen orange concentrate, is expected before processing becomes seasonally heavy, probably not before January 1, 1959. Output of frozen orange concentrate is expected to be somewhat larger in 1958-59 than in 1957-58, when it was cut back by freeze damage to Florida crops.

Deciduous Fruit

Total production of deciduous fruits in 1959 probably will not be greatly different from that in 1958 if the weather is average. Assuming that the weather is about average, larger crops of apricots, sweet cherries, sour cherries, plums, prunes and pears can be expected in 1959. Production of grapes and cranberries may be much the same as in 1958. But smaller crops of apples and peaches seem probable.

Turning attention now to the 1958-59 season--total production of deciduous fruits in 1958 (as estimated October 1) was about 4 percent larger than in 1957 and 3 percent above the 1947-56 average. Most of the increase in 1958 was the result of larger crops of apples, peaches, grapes and cranberries. Supplies of apples for sale after January 1, 1959 are expected to be heavy again, but with a larger percentage of the total in the Eastern States. Also, a larger percentage than a year earlier is expected to consist of preferred medium sizes. Supplies of pears from the lighter 1958 crop of fall and winter pears are expected to be somewhat smaller after January 1, 1959 than a year earlier. Storage stocks of fresh grapes also are likely to be smaller.

Current prospects for the 1958-59 pack of canned deciduous fruits point to total output somewhat under the large 1957-58 pack. The packs of most of the more important items are expected to be down from 1957-58.

The 1958 pack of frozen fruits (excluding juices) is expected to be somewhat smaller than the large 1957 pack, mainly because of a sharp drop in output of frozen cherries. Production of frozen strawberries, the leader in volume frozen, probably will not be greatly different from the large 1957 pack.

Production of dried fruits in 1958 probably will total considerably under the relatively light output in 1957 and be the smallest in 40 years or more. Production of dried prunes is down sharply from 1957, and output of raisins is indicated to be smaller than the relatively light tonnage in 1957.

TREE NUTS

Total production of almonds, filberts, pecans and walnuts, the 4 major commercial tree nuts grown in the United States, has nearly doubled since the mid-1930's. Production of each of these 4 tree nuts trended sharply upward over the same years. These trends probably will continue over the next few years. In 1958, total production was about 6 percent larger than in 1957 and 1 percent above average.

In recent years, domestic production comprised about half of the total supply of tree nuts. The rest consisted mostly of kinds not grown commercially in the United States. Per capita consumption of tree nuts for the past decade has been at a level of about 1.6 pounds, shelled basis.

: This represents mostly the highlights of the 1959 Outlook issue of :

: "The Fruit Situation" for October 1958,

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: Agricultural Marketing Service

Outlook for Housing and Household Equipment
By
George G. Johnson, U. S. Department of Labor
Before The
Agricultural Outlook Conference
Washington, D. C. November 1958

This year has been marked by extremes in the production rate of new homes. The number of dwelling units started dropped to a very low level in February and March. The seasonally adjusted annual rate for these months was 880 thousand non-farm units, the lowest number since early 1949. By May the rate of starts was beginning to rise again and has since increased steadily. The September total of 118 thousand starts was the highest September figure since 1950. On the basis of this rise it seems likely that new homes for the year will exceed the levels of both 1956 and 1957.

The reduced supply of credit and other signs of economic distress late last year caused builders to limit their plans for 1958. There was a sharp drop in commitments for construction loans, purchases of land, and orders for materials. Since builders ordinarily plan ahead for a considerable period, several months of a recovering market passed before builders were able to get expanded programs under way. The spurt in housing activity is demonstrated by the sizable increase in applications for VA and FHA housing loans. In September the number of VA loan applications was several hundred percent above the low point in these applications in April of this year. The number of FHA applications was over 200 percent above the low point in FHA activity in December 1957.

Encouraging as this picture is, the rate of new construction is probably still somewhat below an average of 1.5 million non-farm units per year. This figure has been mentioned as that necessary to permit a satisfactory rate of demolition of substandard housing and to provide for the anticipated formation of new households.

According to the 1956 National Housing Inventory, losses to the housing supply have been averaging about 480 thousand dwellings per year from 1950.^{1/} Almost half of this total consists of transfers of dwellings into non-residential space and losses through disaster. The South has registered the greatest losses of any area, but has also reported the highest additions to its housing inventory.

The total addition to the housing stock has averaged about 1.86 million per year, including new construction, changeover of non-residential space to dwelling units, and conversions (defined as dividing a single unit into two or more units). This includes an average of just under

^{1/} Construction Review, April 1958, Components of Change in the Housing Inventory of the United States. (National Housing Inventory, conducted by the U.S. Census Bureau.)

100 thousand new farm homes per year. A word of caution--these National Housing Inventory figures, which cover the period 1950 to 1956, are not to be compared directly with the housing starts already mentioned. The inventory figures include rural farm homes, mobile homes, and vacation dwellings, none of which is included in the BLS series on starts.

Credit

The supply of credit vigorously affects housing construction and sales. The average mortgage debt has increased right along with the expansion of new housing in recent years. In 1949, there were 9 million mortgaged homes with an average indebtedness of \$3,700. By 1957 the number of incumbered homes had risen to 16 million with an average debt of \$6,100.^{2/} The availability of new mortgage loans is affected by levels of interest rates of long-term commercial and industrial loans. This is because a significant proportion of total mortgages are Government-underwritten (FHA and VA) trusts with semirigid interest rates. Therefore, only conventional mortgages are able to maintain attractive interest rates to investors in a tightening market. FHA insured and VA guaranteed mortgages represent about two-fifths of outstanding home mortgages by dollar volume.

The recent boom period with its strong demand for credit for consumers and for industrial and commercial expansion continued through 1956 and 1957. During this time there was an increasing scarcity of credit which caused interest rates to move upward. Because of the inflationary situation, the Federal Reserve authorities had progressively restricted credit up to the second half of 1957, which had also helped force up interest rates. (The discount rates were increased seven times from 1955 to August 1957.) The increasing difference between interest rates for long-term loans (including conventional mortgages) and the regulated rates of Government-underwritten mortgages led to a decrease in dollar volume of new mortgage financing and contributed to a depression of all phases of housing activity.

By July 1957 the conventional interest rate reported by mortgagees for new first mortgages in 20 large cities had risen to an average level of about 5-3/4 percent. The maximum rate for FHA insured mortgages was still 5 percent and for VA guaranteed mortgages was 4-1/2 percent. Obviously, in spite of their lack of risk to lenders, these mortgages could not compete successfully in the money market. The yield to the lender was increased by paying him discounts or "points" as an inducement to grant an FHA or VA loan. This practice became more and more ineffective in attracting funds to these mortgages as the gap widened between conventional and FHA and VA mortgage interest rates. Where large discounts are required, institutional lenders are typically hesitant about accepting long-term investments.

^{2/} In 1953 the average mortgage debt was \$4,500 on 11 million homes, according to the 1957 Survey of Consumer Finances, Federal Reserve Bulletin, June 1957.

In August 1957 the maximum interest rate of FHA insured mortgages was increased to 5-1/4 percent, and down payments were lowered. Although this brought the rates more nearly in line with the going market rates, a new limit on discounts inhibited the flow of funds into those mortgages. In November 1957 the Federal Reserve Board reversed its earlier policy and began to encourage the expansion of credit by lowering the bank discount rate. The discount rate was lowered several times after that date. In April 1958 the VA guaranteed mortgage rate was raised to 4-3/4 percent, the first change since 1953. This interest rate change followed the enactment of the Emergency Housing Law. The act also authorized the Federal National Mortgage Association to buy at par one billion dollars of FHA and VA mortgages on new houses. At about the same time VA removed any down payment requirement. The minimum down payment was previously 2 percent of the purchase price. These measures, plus a slowdown in the rate of industrial and commercial expansion, freed a large volume of investment funds and the mortgage market attracted a sizable share.

First mortgage conventional interest rates reflected the easier market by declining 3 percent on the average for the first half of 1958, according to Consumer Price Index data. There are signs at present that interest rates are again beginning to rise.

Housing construction and sales next year will depend to a large degree on the adequacy of the credit supply. Within practical limits the Federal Reserve Board and the Treasury Department attempt to maintain the supply of money and credit so that it is just adequate to provide for regular business activity and growth. As we all know, credit too readily available is inflationary; credit too scarce is inclined to drive up interest rates and inhibit residential mortgage activity. It appears at the present that the supply of credit is beginning to be restricted again. The Federal Reserve discount rates have been recently increased and interest rates of new commercial short-term loans are higher.

Housing vacancies

Now we may consider the factors that measure and influence the demand for housing. The first of these is the rate of housing vacancies. Demand continues strong, as indicated by a nationwide low rate of vacancies. In other words, although mobility is high, the homes that families vacate do not remain empty very long. The vacant available dwelling units represented less than 3 percent of the housing supply and only 0.6 percent were for sale (one-fifth of available vacancies) in the third quarter of 1958. This compares to a total available vacancy rate in 1950 of 1.6 percent (0.5 percent for sale).

These vacancies vary considerably by regions with the West reporting the highest rate of available rentals and the North Central the highest rate of houses for sale.

Distribution of Vacant Dwelling Units
Available for Occupancy 1/

Third Quarter 1958

	For rent	For sale
United States	2.2	0.6
Northeast	1.4	0.4
North Central	2.2	0.8
South	2.5	0.6
West	2.9	0.6

1/ Bureau of the Census, Vacant Dwelling Units of
the United States, Series H-111, No. 14, October
1958.

Population Mobility

Population mobility has an important influence on demand for housing because movements of population from one area to another may stimulate purely local demand for the construction of additional housing. The factors that are considered important nationally as related to housing demand, e.g., vacancies, demolition, household formation, do not include this aspect of the bid for new homes. For this reason, the overall effect of mobility on the housing outlook is difficult to assess. According to a census study, one of every five persons in the United States changed his residence in the 12 months ended April 1957.^{3/} About one-third of the migrants moved to a different county or State. On the average between 1953 and 1957 three of the four regions had a net loss due to an excess of out-migration over in-migration. Only the West gained through migration. In this region about 40 percent more people moved in than moved out over the period.

Annual Average In-Migrants and Out-Migrants
by Regions 1953-1957 1/

	In-Migrants (000)	Out-Migrants (000)
Northeast	396	425
North Central	726	730
South	849	1,024
West	699	489

1/ Bureau of the Census, Mobility of the Population
of the United States, Series P-20, No. 82, July 21,
1958.

3/ Bureau of the Census, Mobility of the Population of the United
States, Series P-20, No. 82, July 21, 1958.

Household Formation

The rate of formation of new households is considered a significant indicator of the demand for housing. The rate of net increase in households results from several positive and negative factors: (1) marriages, (2) divorce and separation, (3) doubling up or undoubling, (4) immigration, (5) the growth in financial independence of old people, and (6) mortality.

The number of households has increased for the last 2 or 3 years at an average rate of over 900 thousand annually. The total increase is entirely due to nonfarm households; the number of rural farm households has been dropping at an average annual rate of 150 thousand from 1950 to 1957.^{4/}

The low marriage and birth rates from 1930 through the war years of the 1940's are expected to limit the net formation of new "husband-wife" households to less than their present rate from next year until the mid-1960's. The number of people coming up to the marriageable age population group of 20 to 29 years has been declining every year for several years.^{5/} However, the annual number of marriages declined only slightly from year to year until 1957. In 1957 the number of marriages dropped by 3.4 percent as compared to 1956.^{6/} The rate of decline for the first part of 1958 is even greater. The recent rise in unemployment caused by the business downturn may be blamed for much of the drop. The younger age group was understandably harder hit by unemployment than older groups because of lack of seniority and decrease in the number of available jobs for new workers. As unemployment diminishes the marriage rate may again rise in the next 2 or 3 years. However, the annual rate will still be lower than that of 2 years ago.

There has been a decrease in the proportion of "doubled-up" married couples to all married couples since right after World War II. In 1947, 8.7 percent of all married couples did not maintain their own households. By 1950, the figure had decreased to 5.6 percent and in 1957 was only 3.3 percent.^{7/} It is believed that this doubling up rate is also closely related to economic activity and particularly to the rate of unemployment. Doubling up is expected to decrease further over the next few years.

The growth of retirement plans and social security has created a larger number of financially solvent aged husband-wife families than ever before. Retired families now frequently continue to maintain households, instead of giving up independent living arrangements when their earning careers have ended. The proportion of retired families who are financially independent is expected to increase gradually.

^{4/} U. S. Bureau of the Census, Current Population Reports, Population Characteristics, Series P-20, No. 76, July 7, 1957.

^{5/} Op. cit., Series P-25, No. 146, November 12, 1956.

^{6/} U. S. Department of Health, Education, and Welfare, Monthly Vital Statistics Report, Provisional Vital Statistics for the U. S., April 9, 1958.

^{7/} Op. cit., Series P-20, No. 76, July 5, 1957.

Family composition should be mentioned as related to rental versus home ownership. The trend toward larger families has caused demand for more space in detached, owned houses. This implies only a shift in tenure and not a change in the number of households. A recent fertility study by the Census Bureau shows a 22 percent increase in the number of children born per 1,000 women from 1950 to 1957.^{8/} This is the result of both a high level of prosperity and the trend toward earlier marriages.

We may expect a smaller rate of household formation during the next few years. The Bureau of the Census in its projections of number of households and families estimated average annual increases ranging from 521 thousand to 778 thousand households from 1955 to 1960.^{9/} However, even the top annual estimate of 778 thousand households may prove to be somewhat low if the level of unemployment drops and real income continues to increase. The undoubling rate, the marriage rate, and the birth rate are most sensitive to conditions of economic prosperity or recession.

A real boom in new households can be confidently predicted in about 6 or 7 years when the post-war crop of children reaches marriageable age.

Cost of Home Ownership

The Bureau of the Census reported that in 1950 the numbers of non-farm renter-occupied and owner-occupied dwelling units were almost equal. Today about 6 out of 10 non-farm occupied homes are owner-occupied. This nationwide swing towards home ownership began to be more rapid after World War II. The GI bill contributed much impetus to the trend with its low down payment, low mortgage interest rates, and extended repayment provisions. The FHA mortgage insurance program has also encouraged home ownership, antedating the VA loan guarantee program by a decade.

Much of the success of the government-underwritten mortgage programs came about because families began to realize they could have the advantage of owning modern houses with monthly payments of less than rent. Some of the advantages believed to be part of owning a home are psychological or cultural, such as pride of ownership; but many are more concrete. In general, living area and grounds are larger, there is more privacy, and homeowners often wield more influence in their communities. Homes are often considered investments and payments may represent a desirable form of forced savings to owners. The pre-war market value of most houses doubled or even tripled after the war. Home ownership thus began to be thought of as a hedge against inflation.

^{8/} Op. cit., Fertility of the Population, March 1957, Series P-20, No. 84, August 8, 1958.

^{9/} Op. cit., Projections of the Number of Households and Families, Series P-20, No. 69, August 31, 1958.

The numerous expenses directly related to owning a home make a comparison of actual costs difficult for rented shelter versus owned shelter. The Bureau of Labor Statistics estimated from its 1950 expenditure surveys that the average annual cost for owners was \$832 compared to \$536 for renters. The more significant costs for owners include mortgage payments as well as interest, taxes, insurance, and maintenance and repair costs. From December 1952 to September 1958 the costs for owners increased 13 percent on the average as compared to 14 percent for renters. ^{10/} These trends will be discussed more fully under the section on the outlook for housing prices.

As expected, more than half the non-farm families having incomes under \$4,000 in 1958 rented their homes while more than half having incomes of \$5,000 or over owned their dwellings. The group of families reporting incomes in the middle range of \$4,000 to less than \$5,000 was evenly divided between renters and owners. There is a strong tendency for a family to purchase a home as income rises. This is further borne out by the fact that over 65 percent of the families having a family head of at least 35 years old own their homes.^{11/}

The cost of building materials and construction workers' wages has increased by about 23 percent from the 1950 average to mid-1958 according to the Boeckh Construction Cost Index. During this period the average value of the building lots as estimated by FHA, more than doubled, increasing from \$1,035 to \$2,148. This is only part of the story of the change in the average cost of building a house, however. The average living area of new homes sold under the FHA program increased by a third, from 838 square feet in 1950 to 1,105 square feet in 1957. The average home built in 1957 was one full room larger than the average of 4.8 rooms of the 1950 house. Lot sizes were larger and over three-fourths of the new 1957 houses had garages as compared to less than half of the new houses of 1950.

These physical changes plus the increase in the cost of materials, labor, and land raised the average price of FHA insured new houses from \$8,700 to \$14,500, a 67 percent increase over the 7 year period from 1950 to 1957. This tendency of builders to increase the size, quality, and content of their houses is often taken to mean that they have narrowed the market for their product to ever higher income families. Actually, the median income of urban families has increased about 64 percent, almost the same increase as average new house prices, over the 7 years. The higher income families receiving at least \$7,500 per year in 1950 accounted for about 20 percent of new house sales in that year. In 1957 the same income group purchased almost half the new homes according to results of Consumer Finance Studies. However, this

10/ Consumer Price Index, Bureau of Labor Statistics, U. S. Department of Labor.

11/ 1958 Survey of Consumer Finances, Purchases of Durable Goods, Federal Reserve Bulletin, July 1958.

income group itself represented a much larger proportion of all families in 1957, increasing from less than 10 percent in 1950 to about a fourth of all urban families in 1957.

There is little information available concerning the change in proportion of family income spent for houses currently purchased from year to year. This is a significant figure because other family expenses have increased and the size of the average family is larger. The Federal Housing Administration computes the average ratio of housing expense to income for homes newly purchased under its mortgage insurance program. It is not known how representative of all housing purchases these figures are, but the average expense-income ratios for FHA purchases have declined from 1950 to 1957 for both new and existing homes.

	<u>New homes</u>	<u>Existing homes</u>
1950	21.6	20.3
1957	19.7	19.9

The purchasers of new homes are frequently former owners who have obtained considerable equity in their former houses. This equity, following the sale of the former house, may be reinvested in a new house and consequently make a smaller mortgage possible. The monthly payments on principle and interest are therefore proportionately reduced.

There have been reports from builders that their plans for the latter part of 1958 involve the construction of cheaper houses. Apparently the price reduction will be made possible by fewer built-ins, dry walls instead of plaster, and generally fewer special luxury items. A nationwide opinion survey of builders conducted in October gave an estimated average selling price of \$14,300 for homes to be built in 1958 as compared to \$14,800 obtained from a similar survey a year earlier.12/ This trend may continue into 1959.

Outlook for Housing Prices

Some of the discussion so far has been concerned with average prices at different dates for different qualities of housing. The Consumer Price Index measures price changes to renters and to homeowners over time for a fixed quality of housing. Therefore, changes for some of these items may be more meaningful to the average family which maintains the same living arrangements for years.

Rents for the same quality dwellings have been rising gradually but consistently and are expected to continue to rise in the foreseeable future. The frequency and amplitude of rent changes are influenced by increases in landlords' costs. The rise in property taxes and expenses of maintenance and repair are typical cost items which have risen considerably. As an example, the cost of a typical interior repainting

12/ Survey of the National Association of Home Builders. Builders' Economic Council, October 1958.

job increased 4 percent in the past year and over 10 percent in the past 2 years as measured by the Consumer Price Index.

The incidence and frequency of rent changes are directly traceable to mobility, already discussed in relation to production of new housing. As related to rent change, however, mobility is significant both within and between urban areas. A change in tenancy is the most frequent reason for individual rent changes in the samples of rental units maintained for use in the Consumer Price Index. This is because the renting of shelter often involves a somewhat different relationship between landlord and tenant than between a seller and buyer of commodities. This relationship may be formalized by a lease or consist merely of a verbal agreement. Therefore, the landlord frequently uses the occasion of a change in tenants to raise the rent. This, of course, assumes a condition of high demand for rental shelter and rising costs to the owner-landlord, as at present.

The cost of owning a home to the owner occupant includes maintenance and repairs, fire and extended coverage insurance, property taxes, mortgage interest, and initial purchase. There are other costs, but those mentioned are the most significant and are measured directly for the Consumer Price Index.

The cost to homeowners of maintaining and repairing a house has increased about 15 percent since 1952. In general, we may say that the repair or maintenance items involving a large increment of labor have increased the most. For example, plumbing repairs, interior repainting, and reshingling have risen more than 25 percent. Commodities, excluding service, such as replacement water heaters and paint, have increased the least. This rise in the cost for labor may partly explain the do-it-yourself habit among homeowners. These costs will probably continue upward in 1959.

Fire and extended coverage insurance rates decreased from 1952 to 1955, moved up slightly in 1956 and 1957 and increased sharply in 1958. Much of the increase occurred because of hurricane damage in east coast cities and floods on the west coast. For example, storm damage was partly responsible for Boston rates increasing 65 percent on the average in 1955. Seattle reported an average increase in rates of almost 50 percent in 1957 following floods in that area. Several of the inland and southern cities have reported frequent rate decreases since 1952. Apparently broad-scale patterns of property damage are promptly reflected in State rate adjustments.

Local residential property taxes have increased over 25 percent on the average for the United States, since 1952. Many of the cities that have shown heavy growth have reported the largest increases. Portland, Oregon; Los Angeles, San Francisco, and Cleveland have averaged increases exceeding 30 percent. This increase is related to expansion and installation of new water and sewer facilities, streets, and fire and police protection. Much of the change in the future will be related to volume of new residential construction and new suburban development.

Interest rates of new first mortgages increased regularly from the early 1950's until the 6-month period March to September 1958. In this latter interval rates dropped an average of more than 2 percent. This change does not include the effect of discounts which have been paid to lenders to induce them to make FHA or VA loans. However, it does include the effect of the April 1958 increase in the regulated interest rates on VA mortgages.

Another such cost item derives from the greater incidence of junior mortgages in recent years. It is not uncommon for buyers to assume an existing low-interest first mortgage when purchasing a previously occupied home. Often, in such cases, buyers find it necessary to arrange a second mortgage to make even a reasonably low down payment. The interest rates are frequently 6 percent on junior loans. The value of these mortgages is considerably under par and the buyers obtain them only at a sizable discount. It is not uncommon for sellers to "take back" a second mortgage as part of the purchase price. The fact that their value is generally under par by a considerable margin is taken into account by the seller in setting the purchase price of the home. Interest rates will probably again begin to move up gradually in the months ahead as credit becomes in shorter supply.

Prices of new houses are made up roughly of 50 percent cost of building materials, 30 percent cost of labor, and 20 percent builder's profit and overhead. The total cost of building materials and wages in building construction has increased about 11 percent from December 1952 to mid-1958 according to the Boeckh Construction Cost Index. The actual price change of new houses does not necessarily follow the cost changes closely as the average profit to the builder or developer may vary considerably. However, in the long run rising costs have a direct effect on prices. There is reason to think that prices for housing will continue to move gradually upward.

Household Equipment

The production of major household goods dropped considerably in the first half of 1958.^{13/} Sales have also decreased in volume. Much of the lull results from the drop in the number of new homes constructed. No other single industry has such a pervasive effect on the production of so many diverse commodities as housing. A decrease of 100 thousand housing starts means a broad contraction in the production of building materials and a loss in appliance sales of 100 thousand refrigerators, the same number of kitchen ranges and water heaters, 34 thousand fewer sales of garbage disposal units; 11 thousand fewer dishwashers; 7 thousand installed air conditioners; and 55 thousand less kitchen exhaust fans.^{14/} Of course, a slow down in sales of houses also causes a drop off in retail sales to consumers of some of these items.

^{13/} Federal Reserve Bulletins, Output of Consumer Durable Goods.

^{14/} U. S. Department of Labor, BLS, Survey of Characteristics of New One-Family Houses (Construction Review, April 1957.)

For example, The American Home Laundry Manufacturer's Association reports that home laundry equipment sales for the first half of 1958 (a period of fewer house purchases) were 13 percent below sales for the same interval a year earlier. Generally, the more specialized retail stores felt the effects of the contraction of trade more severely. Household appliance and radio stores' dollar volume was down 14 percent in the second quarter of 1958 compared to the same quarter of 1957. On the other hand, department stores' volume was down only one percent for the same period.

As 1958 progressed into the second half indications of strengthening demand began to appear. Small appliances and housewares showed the most important gains in department store sales. 15/ As sales increase, there are signs that the curtailment of production of some of these items may have been overdone. However, it is possible that low inventories may spur production and speed up recovery of a higher level of activity.

Prices of household equipment have shown an overall decline of about 4 percent since 1953. Much of the drop occurred in 1954, 1955, and the first half of 1958 interspersed with intervals of limited price increases. Price changes of items within this category were mixed. The price level of furniture is slightly higher than it was in 1953 on the average but there were occasional price declines during the period. Prices have been decreasing slightly but consistently in 1958. Household appliances have shown the largest price decrease among home furnishings. The prices have dropped an average of 19 percent from 1953 and are showing little indication of strengthening.

Several developments have occurred since 1953 which influenced price levels and price changes to varying degrees. Sales of household durables were up in 1955 and 1956 sustained by vigorous construction of new housing. More use of consumer credit helped to increase the volume of furniture sales. The growing popularity of discount stores stimulated sales of appliances and contributed to downward trends in prices.

Discount store sales volume became significant and competition began to hurt older outlets. The older stores were caught in a squeeze between the discount prices of the new competitors and the fair trade laws. As early as 1952 or 1953 the courts had found certain State fair trade laws unenforceable. At the present time fair trading is considered unenforceable in 16 States and the District of Columbia. Manufacturers of durable goods have now generally abandoned price fixing policies.

The outlook for household equipment is for a higher level of sales than experienced recently. The recovery in the housing market and drop in unemployment signifies increased demand for these items. Short-term and intermediate-term credit outstanding for consumer goods other than automobiles was at a higher level in July than in any month since last

February. ^{16/} However, the decrease in new household formation and lower marriage rates do not justify prediction of a sales boom such as occurred in 1955 and 1956.

Summary

We have covered in rather broad scope some of the complex elements that affect the outlook for housing and household equipment. The level of 1.5 million new homes per year was mentioned as the minimum desirable rate from a social standpoint. This volume is arbitrarily cited as that needed to make possible the gradual replacement of substandard housing and to provide for the anticipated formation rate of new households.

To attain that level of new construction mortgage funds must be kept available at reasonably low interest rates. It is difficult to predict whether funds will become available in the future in the necessary volume. We do know that there is a strong incentive to maintain the supply of credit adequately to keep the construction industry at a high level of activity. This activity is a bulwark to the health of the economy.

There are several indicators of the present and future demand for housing. The vacancy rates, particularly for homes available for sale, have increased only slightly since 1950 in spite of the large numbers of new homes built since that date. Population mobility, which is at a high level, has the effect of creating local shortages of living quarters. These shortages are not apparent from national or regional vacancy rates.

Household formation is a complex statistic. The net annual increase will slow considerably over the next 6 or 7 years, partly because of the low birth rate of the depression years. However, several factors are expected partially to offset the decline in the number of marriages. The gradual increase in real wages and opportunities for employment raise the proportion of single persons and families who maintain households. This results in fewer "doubled-up" families. The increase in financial independence of old people has a similar effect on the number of households. A rise in average family size has stimulated demand for ownership and for larger, more elaborate homes.

The housing outlook was next discussed from the standpoint of costs of home ownership. It seems that in spite of a long-term trend upward in price, size, and quality of homes, the proportion of income that new owners spend for housing costs has not increased. In enumerating the individual items of cost to homeowners, there appears little doubt that total cost will continue to rise. Some of the increase is due to increased costs of local government installations and services as reflected in taxes. Other increases come from maintenance and repair

16/ U. S. Department of Commerce, Office of Business Economics, Survey of Current Business, September 1958.

costs. The direction of change in insurance and mortgage interest rates is somewhat less predictable.

Household equipment sales are closely tied to the construction rate of new housing. There are signs that production and sales of most items will be higher. Prices, on the other hand, will increase only slightly if at all.

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UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service
Agricultural Economics Division
Washington 25, D. C.

THE OUTLOOK FOR MEAT ANIMALS IN 1959

Statement presented by Harold F. Breimyer at the 36th
Annual Agricultural Outlook Conference
November 20, 1958

Probably the central question in the livestock outlook is this single one: Prices are higher; how long will the higher prices last?

Prices and incomes are indeed improved. Prices of hogs this past summer were more than twice their 1955 low and cattle prices have increased 40 to 85 percent from their lowest points. Cash receipts from marketings of hogs in 1958 will be the largest since 1954, and those from cattle will be second only to the 1951 record.

But these higher prices and incomes partly reflect an upswing of price cycles. To that extent they cannot be expected to last so very long. Moreover, the present superabundance and low cost of feed makes it almost certain that the increase in production that began this year will last for some time, and that prices will eventually decline. How good, then, or how bad, is the outlook?

It perhaps is not as good as we all would hope, nor as bad as many fear. For 1959 it is fairly bright for cattle but not too encouraging for hogs. For the longer future a reduction in cattle prices also is likely. Yet if over-reactions in production could be avoided, future price declines would not be severe.

The decline in cattle numbers that began in 1956 came to an abrupt halt in 1958. An amazingly quick reversal in weather conditions in the western range speeded the underlying cyclical forces. Huge feed crops came along to give additional thrusts as they encouraged the retaining of cattle for restocking, particularly of cows and of feeder cattle and calves. Cattle and calf slaughter in 1958 will be down about $4\frac{1}{2}$ million from 1957, making possible an increase of at least 2 or 3 million in the number of cattle on farms January 1, 1959.

About 90 percent of the reduction in slaughter in 1958 has been in cows and calves. Cows have been held back for "one more calf." Calf slaughter has been down sharply because feeders are grabbing all steer calves, and both breeders and feeders are competing for heifer calves.

Even though cow slaughter is down, the number of cows on farms next January will not be up greatly because no great number of heifers has been added to herds. Heifer slaughter in 1958 is only 2 percent below 1957.

Feeding of heifers has expanded a great deal the last few years. Heifer slaughter has doubled since 1952.

Half to two-thirds of the total increase in inventories next January will be in calves. Many of the heifer calves will be held for breeding. Yet a sizable number of them, as well as nearly all steer calves, will go into feedlots. The sizable supply of fed cattle available next year will help to hold beef output

higher than is usual for the withholding stage of the cattle cycle. Supplies of beef for consumption per person dropped only to 80.5 pounds in 1958 from the high of 85.4 pounds in 1956. Consumption is expected to be near 80 pounds again in 1959. This is in sharp contrast with the last cycle, when beef consumption per person dropped as low as 56 pounds.

Strong demand for fed beef has helped to keep cattle feeding in large volume. With so much emphasis on feeding, beef output could readily stay fairly high throughout the next several years of herd expansion. If this proves true, it is conceivable that extreme price swings could be avoided. Price increases to date, especially for fed cattle, have not been exceptionally large. Prices of fed steers and heifers this fall are scarcely above their postwar average. Prices of cows and feeder stock, especially feeder calves, have gone up more. Their gains reflect to considerable degree the cheap feed situation. They are, to be sure, the more vulnerable to future reduction. Even this fall's paying prices for feeders are at the limit that would allow minimum average profits in feeding, and some reduction may occur.

Any increase in cattle numbers sets the stage for a future price decline, and one is probable sometime in the early 1960's. If, however, the rate of expansion can be kept within bounds, the price drop would not be severe. The moderate rate of expansion in the breeding herd to date, and the possibility that strong feeder demand will continue to draw on the available supply of heifers, offer some hope that such a goal can be achieved. It is certain that an expansionary boom such as 1950-52 would lead to another collapse such as 1953.

For 1959, prices of cattle may not be greatly different from 1958, inasmuch as cattle slaughter and beef output are not expected to change greatly. Prices of cows and feeder cattle will remain high relative to fed cattle prices.

The hog price outlook for 1959 is the opposite of that for cattle. Hog production is on an increase, and lower prices are due soon. Although prices of hogs have held up exceptionally well this fall, they may sag rather steadily during the winter as a consequence of the higher level of hog marketings that is expected beginning about mid-winter. Hogs from the 1958 fall pig crop, which is expected to be up at least 14 percent, will appear on markets about that time. The usual spring advance will be followed by a fall decline. How low prices drop will depend on the extent of the increase in spring farrowings, and most of all on the increase in late spring farrowings. Although an extreme expansion in farrowings is not expected, it could occur. Hog producers have been forewarned of the possibility.

Increased hog production and lower hog prices normally result when feed supplies are as large, and feed prices as low, as they have been the past year. So long as the feed situation remains about as now, hog prices can be expected to remain much below those of 1958. The biggest questions in the longer hog outlook are whether an over-reaction to the present favorable hog-corn price ratio can be avoided, and whether demand for pork can be built up to accommodate the larger supply that could readily be turned out the next few years.

Sheep production is increasing. It may continue upward, particularly if weather in range country remains favorable. The price assurance provided by the Wool Act is a factor encouraging expansion. Prices of sheep and lambs will be influenced by the general level of livestock prices, and some decrease can be expected sometime in the future. Yet because potential markets are promising, the price adjustments could be relatively mild. For 1959 no more than a small drop from 1958 prices seems probable.

For release
Nov. 19, a.m.

THE OUTLOOK FOR PEANUTS IN 1958-59

Background statement prepared by George W. Kromer for use
at the 36th Annual Agriculturel Outlook Conference
Washington, D. C., November 19, 1958

The total supply of farmer's stock peanuts during the 1958-59 marketing year that began August 1, 1958 is placed at 2,224 million pounds, 350 million more than a year earlier. The increase is due to a 30 percent increase in output as carryover stocks were somewhat lower. The 1958 bumper crop will provide a large surplus of peanuts above probable food and farm uses and CCC will acquire the excess under the support program.

Output of peanuts in 1958 is forecast at 1,886 million pounds compared with 1,445 million produced in 1957. The rise reflects record yields as the acreage to be picked and threshed this year is estimated at 1,535,000 acres, only about 3 percent above last year. Most of the increase this year is in the Southwest where unfavorable harvesting weather last year sharply reduced the acreage finally picked and threshed. Estimated yield per acre for the United States is 1,228 pounds, up 258 pounds from 1957 and 67 pounds above the previous record set in 1956. The quality of the crop this year has been running much better than last year.

Prospects are that prices received by farmers for 1958 crop peanuts will average slightly lower than the 10.3 cents per pound for the 1957 crop. The drop would reflect a reduction in the support price and production large enough to keep prices around the loan level. The national average support price for 1958 crop peanuts is 10.7 cents per pound (\$213.20 per ton), compared with 11.1 cents last year. The loan value is the support price less approximately half a cent for charges for storage, inspection, grading and expenses of cooperatively marketing the peanuts. Loans on 1958 crop peanuts will be available to individual producers and to grower associations from the time of harvest through January 31, 1959, and will mature May 31, 1959, or earlier, on demand by CCC.

Prices to farmers for Spanish and Runner peanuts so far this season are averaging near the CCC loan value, which is slightly less than last year. Virginia-Carolina peanuts have just started to move in volume and prices are also running near the loan rate.

Prospects point to an increase in consumption of peanuts during the 1958-59 marketing year. Supplies available during the season will be heavy and prices lower. The peanut consumption rate in 1958-59 could increase some if the anticipated reduction in farm prices is reflected in the price of peanut products purchased by consumers. Consumers' incomes are expected to rise further. With population growing, total consumption of peanuts increased nearly 8 percent in 1956 and another 6 percent in 1957.

If the consumption of peanuts per person in 1958-59 should increase slightly and farm uses are about the same as in recent years, about 570 million pounds, or 30 percent of the 1958 crop, would be available for CCC and commercial crushing, exports or addition to stocks. As most of the excess peanuts will be acquired by CCC under the support program, the quantity crushed and exported will to a large extent depend on Governmental sales policy. As of the end of October, farmers had placed 175 million pounds of 1958 crop peanuts under loan.

Prospects For 1959-60

If growing conditions are average, the 1959 peanut crop probably will provide a moderate surplus above probable food and farm uses.

A marketing quota of 886,000 tons(1,772 million pounds)of 1959 crop peanuts and a national allotment of 1,610,000 acres for picking and threshing was announced on November 3, 1958. This is the minimum marketing quota and acreage allotment permitted under existing legislation.

Peanut producers in December 1956 approved marketing quotas for the 1957, 1958 and 1959 crops. Quotas have been in effect since 1949. Price support will be available at a level between 75 and 90 percent of parity in 1959, depending upon the supply at the beginning of the marketing year.

Although the price support level for 1959 crop peanuts has not been announced as yet, production probably will be large enough to keep prices around support.

Parity prices for peanuts have been in process of shift from "old" to "modernized" parity. Parity for the 1959 crop will complete the change. Based on data for October 1958, the modernized parity calculation was 0.2 cents per pound less than the transitional parity then in effect. Whether modernized parity for the 1959 crop also will be below effective 1958 parity will depend on any changes in prices for peanuts and all commodities in November and December 1958, and on changes in the parity index. Most likely is that it will be about the same as this year's parity, at the least only a little below.

Another factor in determining the support level for the 1959 crop peanuts is the relationship between the estimated supply and the "normal" supply for that marketing year. For example, if the estimated supply (carryover stocks, production and imports) is expected to be not more than 108 percent of the normal supply, support would be at 90 percent of parity. At the other extreme, if the supply percentage should be more than 130, minimum support would be 75 percent. Normal supply is defined by legislation as the estimated domestic consumption and export plus a carryout equal to 15 percent of the two.

The estimated supply, and consequently the minimum support level for 1959 crop peanuts, will depend largely on the size of the carryover. The greater the carryover, whether in commercial or Government hands, the greater will be the supply percentage.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

For Release
Nov. 19, p.m.

THE OUTLOOK FOR RICE IN 1959

Talk by Robert E. Post at the
36th Annual Agricultural Outlook Conference
Washington, D. C., November 19, 1958

The Rice Situation in 1958-59

The first chart (6520) covers disposition of U. S. rice supplies. The black bar represents the total supply, which for 1958-59 amounted to 66.0 million cwt., in rough rice equivalent. This consists of a carry-over on August 1 of 18.1 million cwt., a crop of 47.7 million and imports of 0.2 million.

The bottom part of the shorter bar represents the quantity of rice used domestically and the dotted area just above, the exports. The portion of the black bar projecting above domestic disappearance and exports represents the carryout at the end of the marketing year. The carryout next July 31 is estimated at 12.4 million cwt. This would be materially below a year earlier, and sharply below the peak reached at the end of the 1955-56 marketing year (the 4th bar from the right side). However, a carryover of 12.4 million cwt. would still be about 5 times as large as the 1945-54 average, before stocks began to accumulate.

The reduction in carryout next July 31 reflects increased exports, now estimated at 27.0 million cwt., almost half again as much as in 1957-58 and second only to the 37.5 million cwt. exported in 1956-57. The 10-year 1946-55 average was 17.4 million cwt. Exports are again expected to move largely under Government programs.

Food consumption of rice in the United States in 1958-59 is estimated at 5.7 pounds per capita, unchanged from a year earlier but above the 1947-56 average of 5.4 pounds. The total quantity being used for food is the highest in our history, except for 1917 and 1918.

Brewers' use of rice in 1958-59 is estimated at 4.9 million cwt. and that for feed and seed at 2.6 million cwt. These quantities, including 19.1 million cwt. for food, make up the total of 26.6 million cwt. for domestic disappearance, slightly above the 26.3 million a year earlier but slightly below the 26.8 million cwt. average in 1952-56.

Rice Production in the United States

Rice yields per harvested acre have increased in each year since 1945, except for 1951. The increase was gradual from 1945 to 1954, but since then have risen sharply to the highest level in our history. The U. S. average yield per harvested acre is indicated at 33.30 cwt. for 1958, 11 percent above the 30.58 cwt. in 1955 and almost half again as much as the 1945-54 average of 22.52 cwt.

Rice production has tripled since 1933, reaching an all-time high in 1954 of 64.2 million cwt., as shown on the chart. Acreage increased in each year from 1939 to 1954, except for 1950 when acreage allotments were imposed for the first time after World War II. During the 4-year 1951-54 period, acreage allotments were suspended as a result of the Korean conflict. However, because of a sharp increase in the carryover following the big crop in 1954 and reduced exports in the year, acreage controls became necessary in 1955. The reduction in exports was associated with big crops and the accumulation of rice stocks in other countries, after a period of short supplies and good demand for U. S. rice. In 1955-56, world surplusses were liquidated and in 1956-57 world trade in rice increased 15 percent. This was the year in which exports reached a record high.

Although yields increased in 1955, 1956 and 1957; the reduction in acreage held production below the 1954 level. But in 1958, acreage was up 7 percent and yields up 3 percent, resulting in a 10 percent increase in production over the previous year.

New Legislation

New legislation (P.L. 85-835) provides that: (1) The minimum allotment for rice is to continue indefinitely at the 1958 level of 1,652,596 acres (the same as for 1956 and 1957); (2) the rate of price support for the 1959 and 1960 crops will be unchanged at not less than 75 percent or more than 90 percent of parity, the level to be determined by the Secretary (to be announced for the 1959-crop rice shortly after November 15) and (3) the minimum support level for 1961 will be reduced to 70 percent of the parity price and for 1962 and subsequent years to not less than 65 percent, with the maximum to remain at 90 percent.

Payment-in-kind Export Program for Rice

A payment-in-kind export program similar in principle to ones now in effect for wheat, feed grains and cotton will be extended to rice effective December 1, 1958.

Under the new rice export program, exporters, upon proof of exportation, will be issued a payment-in-kind certificate. The certificates will be redeemable in rough rice or in stocks of five grains--barley, corn, grain sorghum, oats and rye--available in the Commodity Credit Corporation inventory. As in the other payment-in-kind programs, the certificates will be expressed in dollar totals equal to the export payment rate times the quantity of rice exported.

The payment-in-kind program is designed to encourage the movement of rice into export direct from commercial stocks rather than from CCC stocks. This should reduce the quantity of rice taken over by the CCC under the price-support program. At the same time, CCC stocks of rice will be reduced to the extent that certificates are used to acquire additional rice supplies from Government stocks. Except for exports to Cuba and Canada, virtually all U. S. exports of rice have been coming from CCC stocks.

When the payment-in-kind program becomes effective for rice, the Department will discontinue sales of rice from CCC stocks for export, except under barter, CCC credit programs and emergency conditions.

The Rice Outlook for 1959-60

The national rice allotment for 1959 is 1.65 million acres. It is estimated that about 1.60 million acres of rice will be harvested in 1959, after allowing for acreage placed in the Conservation Reserve of the Soil Bank and for normal underplanting and abandonment. Yield per harvested acre in 1955-58 averaged 31.88 cwt. Assuming a yield of 32 cwt. on 1.6 million acres, a crop of 51.2 million cwt. would be produced. This would be more than 7 percent larger than the 1958 crop of 47.66 million cwt. and the 1948-57 average of 47.81 million cwt. In 1958, rice farmers placed 174,000 acres of their allotment in the Acreage Reserve of the Soil Bank. (The Acreage Reserve Program of the Soil Bank was terminated with the 1958 crop.) A crop of 51.2 million cwt. added to the estimated August 1, 1959 carryover of 12.4 million cwt. and imports of 0.2 million cwt. would make a total supply of 63.8 million cwt.

Domestic disappearance for the 1959-60 marketing year is estimated at 26.8 million cwt., slightly above the 26.6 million for the current marketing year. This would require exports of more than 24.6 million cwt. to reduce the carryover on July 31, 1960. Exports of around 25 million cwt. would be below the 27 million cwt. estimated for 1958-59 but above the 1952-56 average of 23.7 million cwt.

The 1959 national acreage allotment, less a national reserve of 950 acres, has been apportioned among the 13 rice-producing States in the same proportion as they shared in the total acreage allotment in 1956 as provided by existing legislation. Marketing quotas, if proclaimed, together with the price support for the 1959 rice crop will be announced shortly after November 15.

Rice Prices and Support Rates

This next chart (1851) shows that season average prices received by farmers for rice have exceeded support levels in every year except in 1951 and 1954 since the support program was first announced in 1941. For the 1958-59 and 1959-60 marketing years, prices received by farmers are again expected to average above the national average support rate. For the 1957-58 marketing year as a whole, the average price received by farmers for rice, including unredeemed rice at the support rate, was 3 $\frac{1}{4}$ cents above the support level.

* * * * *

The Rice Situation, which is published once a year, is scheduled for release on December 24, 1958

Rice, in terms of rough: Supply and distribution, United States,
1955-58 and 1959 projected 1/

Items	Year beginning August 1				
	1955	1956	1957 <u>2/</u>	1958 <u>3/</u>	1959 <u>4/</u>
	Million cwt.	Million cwt.	Million cwt.	Million cwt.	Million cwt.
<u>Supplies</u>					
Beginning stocks	26.7	34.6	20.1	18.1	12.4
Farm production <u>5/</u>	56.0	49.5	43.2	47.7	51.2
Imports <u>6/</u>	.2	.4	.2	.2	.2
Total <u>7/</u>	82.3	84.6	62.7	66.0	63.8
<u>Disappearance</u>					
Food <u>8/</u>	19.1	19.2	19.0	19.1	19.2
Industry <u>9/</u>	6.1	5.1	4.8	4.9	5.0
Feed and seed	3.9	2.7	2.5	2.6	2.6
Total domestic	29.1	27.0	26.3	26.6	26.8
<u>Exports</u>					
Total disappearance	18.6	37.5	18.3	27.0	
	47.7	64.5	44.6	53.6	
<u>Ending stocks</u>	34.6	20.1	18.1	12.4	

1/ Milled rice converted to rough basis at annual extraction rate.

2/ Preliminary.

3/ Tentative.

4/ Projected.

5/ Includes estimates of production in minor States.

6/ Consist mostly of broken rice.

7/ Adjusted to equal total distribution.

8/ Includes shipments to territories and military food use at home and abroad.

9/ Primarily for beer production.

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November 19, a.m.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

THE OUTLOOK FOR TOBACCO IN 1959

Statement presented by Arthur G. Conover at the
36th Annual Agricultural Outlook Conference,
Washington, D. C., November 19, 1958

Supplies of tobacco are being gradually reduced from the high levels of a few years ago. This year, tobacco growers planted 35 percent less acreage in tobacco than 4 years ago and the smallest acreage in 50 years. The reduction reflects sharp cuts in acreage allotments and sizable placements of acreage of some kinds in the acreage reserve of the Soil Bank program. While tobacco acreage has declined appreciably, per acre yields for several kinds of tobacco have shown substantial increases in the last several years. In 1958 yields per acre for all tobacco types combined averaged over a fifth higher than 4 years ago and the highest on record. Total production of tobacco in 1958, though 7 percent larger than in 1957, is around 20 percent smaller than annual production in the early 1950's. For most kinds of tobacco the carryovers at the outset of the 1958-59 marketing year are lower than a year earlier. Since the 1958 crops of several kinds are below the anticipated 1958-59 disappearances (domestic use plus exports), carryovers at the beginning of the 1959-60 marketing year probably will decline still further.

The 1959 marketing quota and acreage allotment for flue-cured will be announced by December 1, and 1959 quotas and acreage allotments for other kinds of tobacco will be announced by February 1. Soon after the quota announcements, growers of flue-cured, burley, Maryland, Virginia sun-cured and Pennsylvania filler will vote in separate referendums on whether they favor marketing quotas on their 1959, 1960 and 1961 crops. At least two-thirds of the growers voting must approve if quotas are to be in effect. Marketing quotas will be in effect for the 1959 crops of fire-cured, dark air-cured, Connecticut Valley binder and Ohio filler-Wisconsin binder since growers approved them in referendums held last February and in February 1957.

Government price supports for the kinds of tobacco under Federal marketing quotas are mandatory at 90 percent of parity except for the fire-cured, dark air-cured and sun-cured types. The support levels for the latter types are set at fixed percentages of the burley support (75 percent for fire-cured and 66-2/3 percent for dark air- and sun-cured), but they cannot go above their 1957 support levels unless 90 percent of parity for these tobaccos exceeds those levels.

During the 10 years prior to the 1958 marketing season growers placed 2-3/4 billion pounds (farm sales weight) of tobacco under Government loan. About 65 percent of this was subsequently disposed of mainly through the regular channels of trade. The Commodity Credit Corporation did not take but little into its own inventory and growers' organizations retain title to nearly all still under loan. Just prior to the 1958 season about 617 million pounds (farm sales weight) of flue-cured remained under loan; this is equivalent to about 45 percent of an average crop and represented 27 percent of total carryover. During the flue-cured auction season now nearing a close, approximately another 130 million pounds have gone under loan. Burley under Government loan (including a small

proportion in CCC inventory) is about 278 million pounds (farm-sales weight); this is equivalent to nearly 55 percent of an average crop and represents 22 percent of total carryover.

Position of Different Kinds of Tobacco

Most of the nearly three-fourths of a million farm families growing tobacco in this country depend on it as a vital source of cash income. They grow nearly two dozen types of tobacco, several of which can be combined into broader groups or kinds of tobacco for the purpose of the discussion which follows:

Flue-cured: The 1958-59 total supply of flue-cured at about 3.4 billion pounds is about 2 percent less than for 1957-58 and 8 percent below the record level of 2 years ago. Though the 1958 crop is about 12 percent above last year, it is well below other postwar years except 1948. The drop in carryover from mid-1957 to mid-1958 more than offset the increase in this year's crop over last and thus reduced total supply. Domestic usings increased moderately because of the higher level of cigarette output. Exports of flue-cured in 1957-58 were 5 percent lower than in 1956-57 and 20 percent below the near-record figure of 1955-56. However, exports exceeded those in each of the 3 years prior to 1955-56. Domestic use of flue-cured is expected to make a small gain in 1958-59 but exports might decline a little further.

All except a small fraction of the 1958 flue-cured crop has been marketed. Prices have averaged nearly 58 cents per pound--4 percent above last season and the highest on record. The 1958 crop support level at 54.6 cents per pound is about 7 percent higher than a year earlier and above any previous year. About an eighth of the crop has been placed under Government loan--a little larger proportion than in 1957.

Burley: The 1958-59 total supply of burley at over 1-3/4 billion pounds is about 1 percent lower than for 1957-58 and around 5 percent below the peak level of 4 years ago. The 1958 crop is estimated at close to last year's and the carry-over declined only a little. Domestic use of burley dropped slightly in 1957-58 but exports held even with a year earlier when they were the lowest for several years. Burley tobacco auctions will open November 24. Prices are expected to average at least as high as last season when they were second highest on record. The level of price support is 55.4 cents per pound--7 percent higher than last season and considerably above previous years. In the last 2 years, only a small percentage of the crops was placed under Government loan in contrast with several prior years.

Maryland: The 1958-59 total supply of Maryland tobacco is estimated at 10⁴ million pounds--about 2 percent less than for each of the preceding 2 years. The 1958 crop is smaller than a year earlier but carryover may be up a little. Domestic use in 1957-58 rose some from the low 1956-57 level but exports declined moderately from the postwar high of a year earlier. Auction marketings for the 1958 crop will be held during next spring and summer. The 1958 crop support level is 50.8 cents--nearly 6 percent above last season when about a sixth of the crop was placed under Government loan. The average price at last season's auctions for the comparatively poor quality 1957 crop was 44.0 cents per pound.

Fire-cured: The 1958-59 total supply of fire-cured tobacco at about 178 million pounds is 9 percent below 1957-58 and a record low. The 1958 crop is estimated to be more than a tenth below 1957 and below any previous year; carryover also declined appreciably. Total disappearance of fire-cured tobacco in the past year was practically the same as a year earlier with a small increase in domestic use about offsetting the decrease in exports. Auctioning of Virginia fire-cured will begin by around early December and of Kentucky-Tennessee types, probably in early January. The 1958 crop support level is 38.8 cents per pound, the same as for 1957 when it was higher than for any previous crop. Nearly three-tenths of last year's crop went under Government loan.

Dark air- and sun-cured: The 1958-59 total supply of dark air-and sun-cured tobacco at nearly 100 million pounds is nearly 6 percent below 1957-58 and the smallest in many years. The 1958 production is indicated to be less than last year's comparatively small crop and carryover is the lowest since 1954. The 1957-58 domestic use and exports were both substantially lower than the higher-than-usual levels of 1956-57. Auctions for the 1958 crops will open shortly. The level of price support is 34.5 cents per pound--the same as in 1957. Last season, 15 percent of the dark air-cured tobacco went under Government loan.

Cigar filler: The 1958-59 total supply of Pennsylvania and Ohio filler at 178 million pounds is 2 percent above 1957-58 when it was the smallest on record. The Pennsylvania crop is the largest in 7 years, but the Ohio crop is very small due to excessive rainfall. The increase in this year's Pennsylvania crop more than offsets the decline in carryover of both types. The Puerto Rican filler crop harvested early this year was about a tenth larger than the small crop of a year earlier and carryover on October 1 was only slightly below a year ago. Domestic use of cigar filler tobacco declined in 1957-58 and exports as usual were relatively insignificant.

Cigar binder: The 1958-59 total supply of Connecticut Valley binder types at 44 million pounds is nearly a fifth less than for 1957-58 and down almost a half from the 1951-55 average. Production of these types has been drastically reduced in the last few years and carryover is falling steadily. The 1958-59 total supply of Wisconsin binder types at about 67 million pounds is 7 percent below 1957-58 and about a fourth lower than the 1951-55 average. This year's production of Wisconsin tobacco is indicated to be above last year's, but carryover is down more than a tenth from a year ago. Domestic use of the Connecticut Valley binder types dropped 17 percent below a year earlier and over 40 percent below the 1951-55 average. This reflects in large part the impact of the processed binder sheet--an important technological development in the cigar industry in recent years. The domestic use of Wisconsin binder types in 1957-58 was about a tenth below a year earlier and a fourth less than the 1951-55 average. A substantial quantity of Wisconsin tobacco is used in the manufacture of scrap chewing which is declining steadily. The past year's exports of Connecticut Valley tobacco were below the higher-than-usual level of 1956-57 but exports of Wisconsin tobacco were up sharply.

Shade-grown wrapper: The 1958-59 total supply of cigar wrapper tobacco at 38 million pounds is 2 percent above the previous high of 1957-58. The increase in carryover more than offset the 7 percent decrease in production, this year compared with last. Disappearance in 1957-58 was 7 percent above the previous high of 1956-57. Domestic use increased only a little but exports were up 17 percent and a record high.

Consumption of Tobacco Products

The United States has about 59 million persons who smoke every day and another 6 million who smoke occasionally. The number smoking cigarettes daily is about $33\frac{1}{2}$ million males and perhaps as many as 21 million females. Approximately 12 million men smoke cigars regularly or occasionally and over 8 million men smoke pipes regularly or occasionally. A substantial number of those smoking cigars or pipes occasionally are daily smokers of cigarettes.

Cigarettes: Cigarettes utilize flue-cured, burley, Maryland and imported oriental tobacco. The 1958 cigarette output is estimated at a record 457 billion compared with 442 billion in 1957. Domestic consumption absorbs the predominant share of this output and is likely to continue to rise as the population of smoking age increases and probably as the result of additional smokers among women. Also some smokers of filter tip cigarettes tend to smoke them at a higher rate than nonfilter tips. The proportion of filter tips has continued to gain; some private trade estimates now place the filter tip proportion at around a half of total sales compared with only about 3 percent 5 years ago.

The quantity of tobacco (farm sales weight) utilized in cigarettes turned upwards in the year ending June 30 after declining for several years. The upturn appeared to be largely caused by the increase in the number of cigarettes inasmuch as the unstemmed tobacco utilized per unit of output was about the same as a year earlier. It is still too early to tell whether unstemmed leaf used per 1,000 cigarettes has stabilized or may decline further. The development of tobacco sheet, fuller utilization of leaves including midribs (stems) and the dimensions of cigarettes and filters all have a bearing on this.

Cigars and cigarillos: Total cigar and cigarillo consumption in 1958 is estimated at near 6.4 billion--3 percent more than in 1957. Further gains seem likely in 1959. Cigarillo-size cigars probably comprised at least an eighth of the total number in contrast with a small fraction a few years ago. Domestic factories provide $93\frac{1}{2}$ percent of all cigars consumed; bonded manufacturing warehouses using only imported tobacco, $3\frac{3}{4}$ percent; Puerto Rican factories, $2\frac{1}{4}$ percent; and imported cigars, less than a half of 1 percent. Sheet binders have replaced natural leaf binders on many leading brands of cigars and a very large proportion of cigarillos. This expanding use, coupled with the increased proportion of cigarillo-size cigars has lowered the quantity of farm-sales weight tobacco required per 1000 units of output.

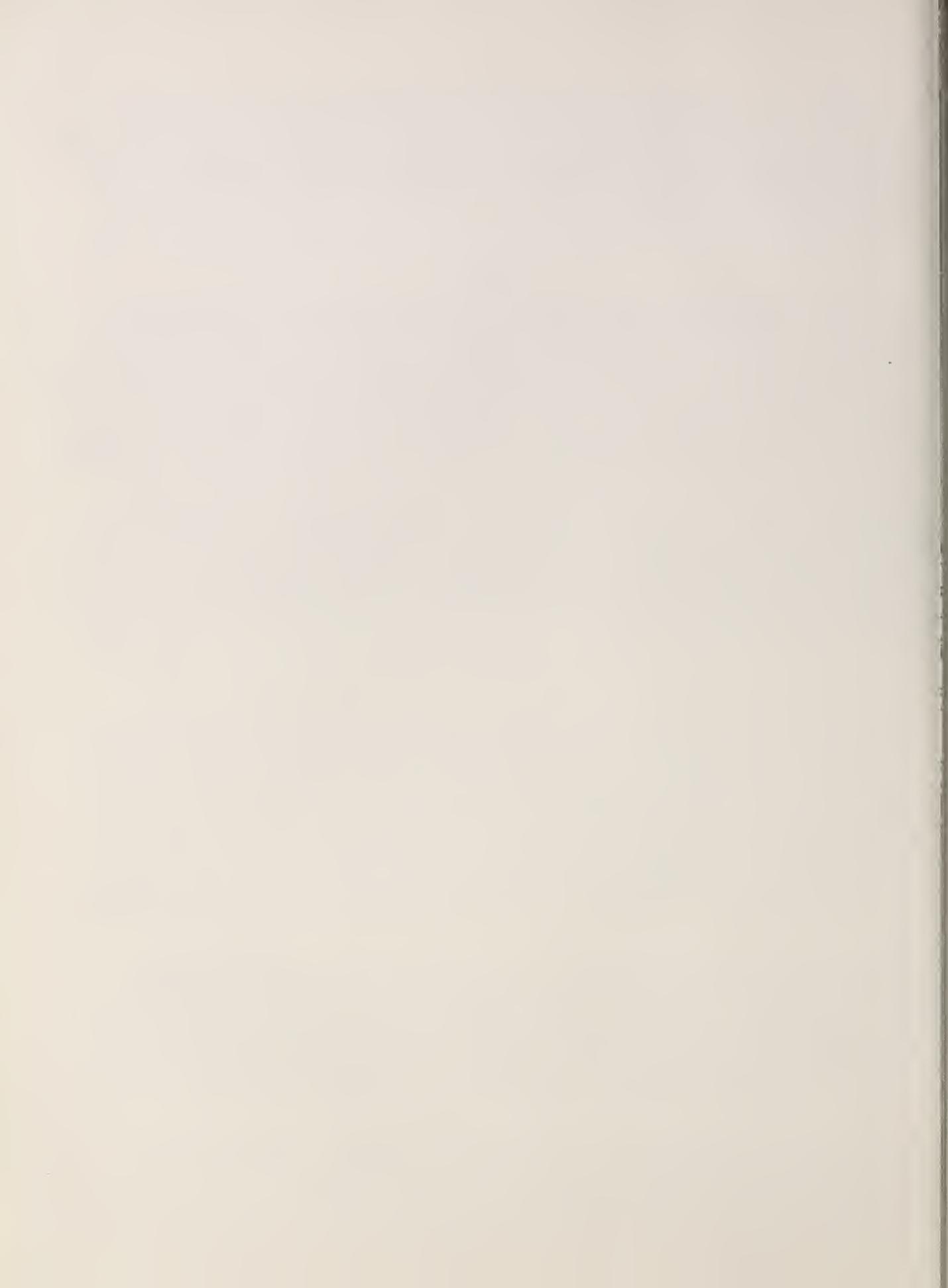
Smoking tobacco: Smoking tobacco used in pipes and "roll-your-own" cigarettes is a secondary outlet for cigarette tobaccos. Output of smoking tobacco may approach 77 million pounds this year--appreciably more than in both 1957 and 1956. This represents the first upturn in annual output in 9 years. Production is still more than a fourth below the 1946-50 average. The upturn in smoking tobacco consumption in 1958 was probably due in part to recession effects in some areas. Smokers could economize this way. A further appreciable increase in 1959 does not appear likely in view of the generally favorable outlook for consumer income.

Chewing tobacco: Chewing tobacco products are made mainly from burley, dark air-cured and cigar binder tobaccos. The 1958 output of chewing tobacco is estimated at 69 million pounds--5 percent lower than in 1957 and nearly 30 percent below 10 years ago. A continuing decline appears to be in prospect for chewing tobacco consumption.

Snuff: The principal domestic outlet for fire-cured tobacco is in snuff. This year's output of snuff is estimated at 34 million pounds--6 percent lower than in 1957 and 10 percent lower than in 1956. In the 10 years before 1956 output was relatively stable, ranging between 39 and 41 million pounds. Consumption of snuff in 1959 may hold near this year's level if industries in which workers commonly use snuff continue to expand.

Exports

Exports of unmanufactured tobacco in the 1957-58 marketing year totaled 528 million pounds, farm-sales weight--5 percent less than in 1956-57 but nearly the same as the recent 10-year average. During 1957-58, substantial declines from a year earlier in U. S. tobacco exports to Belgium, Italy, Finland, Indonesia, Viet Nam and Japan were partially offset by moderate increases to Netherlands and Australia and substantial increases to Britain and Thailand. German takings held nearly even. Sales for foreign currencies (P.L. 480 shipments) accounted for about 7 percent of the total leaf exports in 1957-58 compared with 11 percent in 1956-57. In late August, Congress extended the cutoff date of the Agricultural Trade Development and Assistance Act until the end of 1959 and authorized additional funds for P.L. 480 operations. Sustaining the export demand for U. S. tobacco is the increase in cigarette manufacture abroad particularly in Western Europe. On the other hand, U. S. producers face competition from larger foreign-grown supplies, and trade restrictions in many countries hamper our tobacco exports. Present indications are that 1958-59 tobacco exports may be down a little from the 1957-58 levels.



THE OUTLOOK FOR VEGETABLES AND POTATOES IN 1959

Statement Presented by Will M. Simmons at the 36th
Annual Agricultural Outlook Conference
Washington, D. C., November 19, 1958

COMMERCIAL VEGETABLES

OUTLOOK TRENDS

Before getting into a discussion of prospects for 1959, it might be well to take a look at some of the trends which have occurred in the vegetable industry. Production of commercial vegetables for fresh market and processing combined, increased at a faster rate than population during the last two decades. However, the most rapid increase occurred during World War II. In the postwar period, production has increased at about the same rate as population. This trend seems likely to continue in the next few years. Thus, total production of vegetables 4 to 6 years from now probably will be about an eighth larger than the 1955-57 average, about keeping pace with population growth. But the form in which vegetables are sold to housewives will continue to change.

Both during World War II and in the postwar period production of vegetables for commercial processing expanded at a more rapid rate than population. On the other hand, production for fresh market in the postwar period did not increase as much as population. The prospect of higher income, improved processing technology and increasing emphasis on "convenience foods" suggest some shifts among individual items, and a continuing trend toward more processed vegetables during the next few years.

OUTLOOK FOR 1959

Supply and Demand Prospects - Supplies of fresh and processed vegetables available during the first 6 months of 1959 probably will be a little larger than a year earlier, and dry beans substantially larger. Indications are that the supply of potatoes, too, at least into the spring, will be larger than a year earlier. Sweetpotato supplies appear to be about in line with last season, but materially less dry field peas are available.

Economic activity has recovered from the lows reached in the spring and some further expansion is likely in 1959. With prospects for a continued high level of consumer income, demand for vegetables is expected to remain strong. Supply and quality of potatoes and vegetables available, and pattern of marketing will have an important influence on farm prices and income, and on consumer prices.

Materials, equipment and facilities necessary to produce, package and distribute vegetables are expected to be in generally ample supply during the first half of 1959. But prices of many items, and consequently production and distribution costs will be a little higher than in 1958.

Commercial Fresh Vegetables - Assuming more normal weather, supplies of fresh market vegetables in the first half of 1959 are expected to be at least moderately larger than a year earlier. Production of winter vegetables in 1958 was the smallest in a decade, largely as a result of freezes and excessive rains which destroyed or severely damaged Florida crops. There was also considerable weather damage in Texas. Tender vegetables such as snap beans, sweet corn, cucumbers, green peppers and tomatoes were especially hard hit. Unusually heavy imports of some items, including cucumbers, tomatoes and peppers helped to alleviate the shortage. Although acreage and production of spring vegetables and melons were near the 1949-56 average, many spring crops were delayed and marketings through early spring remained relatively light. Barring another severe winter, supplies of vegetables in the early months of 1959 are expected to be substantially larger than those of a year earlier.

Should production and pattern of harvest be more normal, both farm and retail prices in winter and early spring will average well below the record or near record levels of a year earlier.

Processed Vegetables - Supplies of canned vegetables into mid-1959 are likely to be a little larger than the heavy supplies of a year earlier. Supplies of frozen vegetables are ample, though materially below those of a year ago. Both canned and frozen stocks at the beginning of the season were smaller than a year ago, but indications are that an increase in the canned pack will more than offset the smaller beginning stocks. Among major canned items, tomato juice and tomato products are expected to be in heaviest supply. But more snap beans, tomatoes and sauerkraut are also in prospect. Green peas remain in heavy supply. Substantially less canned corn is available, along with less lima beans and beets.

With large supplies of processed vegetables available, per capita consumption is expected to continue at a high level. Because of higher processing and distribution costs, retail prices of canned and frozen vegetables in the first half of 1959 are likely to average a little higher than in the corresponding months of 1958. Although total acreage of vegetables for processing in 1959 may be close to that of the current season, there is likely to be a moderate to substantial cut in acreage of tomatoes for processing.

Dry Beans and Peas - The 1958 crop of dry beans was the largest since 1949. Domestic consumption probably will be a little larger than last season, and exports substantially larger. Even so, all types except baby limas and pinks are in ample to heavy supply, and sizeable quantities of beans are likely to be delivered to the Commodity Credit Corporation. Prices received by farmers probably will average moderately to substantially below those of a year earlier, but little or no change is expected in retail prices. Farmers should plant materially less acreage to dry beans in 1959.

Supplies of dry peas are substantially smaller than a year ago as a result of a small crop. Because of smaller supplies and higher prices, domestic use is expected to be moderately smaller than that of last season. Although export demand is strong as a result of weather damage to the European crop,

exports are likely to be materially lighter because of the tighter supply situation. However, export demand will have an important influence on the dry pea market, and prices received by farmers will average much higher than a year earlier. Retail prices also are expected to be higher. Farmers probably will plant a substantially larger acreage of dry peas in 1959.

POTATOES AND SWEETPOTATOES

OUTLOOK TRENDS

Total potato production is somewhat higher than it was 20 years ago. But over the period as a whole production failed to keep pace with the growth in population. Production trended up during World War II, reached a peak in 1946, then trended down through 1951. Since that time production has tended to increase at about the same rate as population. With an increasing portion of the crop going into processing and with increased emphasis on quality and merchandising of both fresh and processed items, prospects during the next 5 years appear good for increasing total consumption about in line with population growth. However, since potatoes have been in surplus supply in most recent years, only a moderate increase over 1955-57 level of production would be required to meet the increased needs five years from now. This would still be below the 1958 crop.

During the last two decades production of sweetpotatoes declined sharply, with total production plunging to little more than half the prewar level. The major forces which caused this sharp decline in production may have reached their maximum effect. Total production during the next 4 to 6 years is likely to hold near current levels.

REVIEW AND OUTLOOK FOR 1959

Fewer potatoes were available in the first half of 1958 than a year earlier. January 1 stocks of fall crop potatoes were substantially smaller than in the preceding year and winter and spring production was down. Because of severe weather damage in Florida acreage and yields of winter potatoes were down sharply. Production at 4.8 million hundredweight was almost a third below the 1957 record. The early spring crop in Florida and the late spring crop in several of the southeastern States and California were also delayed and damaged by adverse weather. Production of both crops were down about a tenth from the previous year, but both were above the 1949-56 average. Prices rose rapidly from early February to April, then declined as marketings from the late spring crop picked up. Prices in the May-July period were at moderate levels, though substantially above the low levels of a year earlier.

Partly as a result of the relatively favorable prices early in the year, farmers planted moderately larger acreages to both summer and fall crops. Weather was generally favorable and yields averaged above the high levels of 1957. Production was up substantially and prices received by farmers declined sharply, to \$1.02 per hundredweight in October.

Because of a fall crop of 176 million hundredweight, which is considerably in excess of normal market requirements, heavy supplies of potatoes seem assured into mid-spring. Growers in Florida and California indicated, in early September, intentions to plant substantially less acreage for winter harvest. But barring extremely adverse weather such as hit the Florida crop last winter, yields are likely to be substantially higher.

Federal marketing agreements and orders are again in effect in areas which account for about 70 percent of the fall production. These orders restrict the marketing of tablestock potatoes to the more desirable qualities and preferred sizes. Also, to promote orderly marketing of good quality potatoes, and to provide growers with an outlet for less preferred grades the Department of Agriculture is operating a potato diversion program similar in many respects to the one in effect last season. These programs will take some of the pressure off potato markets. But supplies are burdensome and prices received by farmers into mid-spring are expected to average substantially below year earlier levels. Retail prices are also likely to be lower.

Because people like to eat about the same quantity of potatoes regardless of price, even moderate overproduction seriously depresses prices. Farmers in 1959 would do well to plant a materially smaller acreage of potatoes.

Supplies of sweetpotatoes are substantially the same as a year ago, but somewhat below the 1949-56 average. Prices are expected to advance seasonally into winter and spring, but at the farm level probably will average a little below those of last season. Recent experience indicates that farmers are likely to plant about the same acreage in 1959 as this year.

For release
November 19 p.m.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

THE OUTLOOK FOR WHEAT IN 1959

Talk by Robert E. Post
Agricultural Economics Division
At the 36th Annual Agricultural Outlook Conference
Washington, D. C., November 19, 1958

The wheat outlook for 1959-60 was discussed in the August issue of the Wheat Situation, which was issued prior to the seeding time of the 1959 winter crop. Recent changes in the outlook were published in the October issue of the Wheat Situation. I have arranged to have the 3 charts which appear in the chartbook projected to illustrate my remarks.

The Wheat Situation for 1958-59

The wheat supply for the year beginning July 1, 1958 is estimated at 2,340 million bushels, shown as the last black bar on the chart (6512). This is 14 percent above the previous record supply in 1956-57. The table on the back page of this printed statement shows the items which make up the 1958-59 supply as compared with earlier years.

Domestic disappearance in 1958-59, estimated at 610 million bushels, shown as the bottom portion of the last bar, is expected to be not much different from that in 1957-58. However, exports, estimated at 430 million bushels, shown as the dotted portion of this bar, would be moderately above the 402 million a year earlier. At this level, exports would be 22 percent below the all-time record in 1956-57 of 550 million bushels.

In order to move wheat into export, prices must be at the world market level. This, by reason of domestic prices exceeding world prices, can only be accomplished by export payments. Virtually all United States wheat exports require these payments. In addition, exports have been materially increased by special Government programs, including sales for foreign currencies, barter and various donation programs. Of the total exports in 1957-58, 62.1 percent moved under these special programs; this was slightly more than the 58.0 percent average in the previous 4 years.

On the basis of this prospective supply and disappearance, the carryout at the end of the 1958-59 marketing year, indicated by the part of the black bar projecting above disappearance, would total about 1,300 million bushels. A carryout of this size would be the largest in our history and 420 million bushels above a year earlier. Moreover, the increase would be almost 3 times the reduction in carryover stocks which occurred as the result of Government programs between June 30, 1955 and June 30, 1958.

Production in 1958 reached an all-time high of 1.45 billion bushels, indicated October 1. This is shown by the solid line on this next chart (6511). This record crop resulted from record high yields, shown by the dotted line. Yields from 1940 to 1952 fluctuated around a 17.0 bushel yield average, which was almost the same as the 17.3 bushel yield in 1953. From 1953 to 1957 yields increased steadily, shown on the chart as almost a straight line. The increase in these five years amounted to about 25 percent. Then in 1958, yields shot up sharply, a 25 percent increase in one year. Dr. Reitz will tell you about the development of high yielding varieties which point to further sharp national increases in years to come.

Acreage is not shown on the chart. Although 5.3 million acres were placed in the Acreage Reserve Program, the 1958 harvested acreage amounted to 53.6 million acres. This was only 1.4 million acres below the 55 million-acre minimum allotment because of overplanting and little winterkill. The previous record production of 1.36 billion bushels in 1947 was on 74.5 million acres, 39 percent larger than in 1958. The yield in that year was 18.2 bushels compared with 27.0 bushels for 1958.

The Wheat Outlook for 1959-60

With acreage allotments and marketing quotas in effect for 1959, and without the Acreage Reserve Program, about 55 million acres of wheat will probably be harvested. Conditions for the winter crop started out excellent, but subsequently the crop has encountered a period of dry weather. If the 1956-58 average yield of 23.0 bushels per acre should be obtained, a crop of about 1,265 million bushels would be produced. Though 13 percent smaller than the 1958 production, a crop of this size would again exceed estimated domestic requirements and exports by about 200 million bushels. If disappearance should hold at the 1958-59 level of about 1,040 million bushels, a crop of this size would again increase the carryover on June 30, 1960 to over 1,500 million bushels compared with the 1,300 million bushels indicated for a year earlier.

The Price Situation and Outlook

The next chart (836) shows market prices at Kansas City and the support rate. This brings out the fact that since the inauguration of the price support program in 1938, except in the 2 years following World War II when demand was great, prices generally have averaged close to the support rates. The chart also shows that prices at Kansas City have been lowest in either June, July or August and, as quantities were withdrawn under the support program from market supplies, that prices advanced to a level near or above the support level, depending upon how tight "free" supplies became. The low month to date this season was July, after which prices have advanced each month. In most years, prices have averaged highest in March or later. This year, the high month probably will depend more than usual upon when farmers market their large remaining "free" supplies as well as the quantity farmers place under the Government price support program.

As a result of the unusual degree of withholding of wheat by farmers, prices for the 1958-59 marketing year as a whole may average only slightly lower relative to the loan than in 1957-58, when the national average price to farmers, including unredeemed wheat at the loan rate, was 6 cents below the announced support of \$2.00. The price in mid-October this year averaged \$1.73, 9 cents below the 1958 support of \$1.82. This compares with the 1957 mid-October price of \$1.92, 8 cents under the \$2.00 support. Earlier in the year, prices generally were lower relative to the support than last year. While market prices may be weakened by materially increased selling of "free" wheat at times during the remainder of the marketing year, the large unredeemed quantities which will be delivered to the CCC at the support rate will tend to offset the effect of such marketings in the annual average price received by farmers.

The "advance" minimum national average support price for 1959-crop wheat was announced on May 1 at \$1.81 per bushel. The advance support price reflects 75 percent of the estimated modernized parity price for wheat as of July 1, 1959, and compares with the \$1.82 per-bushel support for the 1958 crop. The minimum support for 1959 will not be reduced but will be increased if 75 percent of parity as of July 1, 1959 indicates a higher support price.

Wheat: Supply and distribution, United States,
1953-58 and 1959 projected

Item	Year beginning July						
	1953	1954	1955	1956	1957	1958	1959
	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.
	bu.	bu.	bu.	bu.	bu.	bu.	bu.
<u>Supply</u>							
Carryover on July 1	605.5	933.5	1,036.2	1,033.4	908.8	880	1,300
Production	1,173.1	983.9	934.7	1,004.3	947.1	1,450	1,265
Imports ^{4/}	5.5	4.2	9.9	7.8	11.5	10	10
Total	<u>1,784.1</u>	<u>1,921.6</u>	<u>1,980.8</u>	<u>2,045.5</u>	<u>1,867.4</u>	<u>2,340</u>	<u>2,575</u>
<u>Domestic disappearance</u>							
Food ^{5/}	487.1	485.9	481.5	482.4	484.0	484	484
Seed	69.5	64.8	67.7	57.7	63.5	66	66
Industry	.2	.2	.7	.5	.3	---	---
Feed ^{6/}	76.8	60.1	51.2	46.5	36.6	60	60
Total	<u>633.6</u>	<u>611.0</u>	<u>601.1</u>	<u>587.1</u>	<u>584.4</u>	<u>610</u>	<u>610</u>
<u>Exports</u> ^{7/}							
	217.0	274.4	346.3	549.6	402.5	430	
Total disappearance	<u>850.6</u>	<u>885.4</u>	<u>947.4</u>	<u>1,136.7</u>	<u>986.9</u>	<u>1,040</u>	
<u>Stocks on June 30</u>							
	933.5	1,036.2	1,033.4	908.8	880.5	1,300	

^{1/} Preliminary.

^{2/} Imports and distribution are estimated.

^{3/} Projected.

^{4/} Excludes imports of wheat for milling in bond and export as flour.

^{5/} Includes shipments to United States Territories and military food use at home and abroad.

^{6/} This is the residual figure, after all other disappearance is accounted for.

^{7/} Actual exports. Prior to October 1954 they included those for civilian feeding under the military supply program.

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For release
Nov. 20 9:30 a.m.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Institute of Home Economics

PLANNING FOR THE REPLACEMENT OF DURABLE GOODS

By Jean L. Pennock, Home Economist

Budgeting is a way of getting, within our available resources, the things we want most and need most. It is a technique to insure that the needs and wants of the moment do not take all of income and leave no provision for the occasional "large ticket" expenditures when they must be made.

A sizable part of all "large ticket" expenditures are for durable goods and many of them are for the replacement of items already owned. How much of the family dollar goes into replacements it is difficult to say, but it is readily apparent that enough is used in this way to jeopardize the success of the budget if these expenditures are not carefully planned for.

The first step in fitting replacement purchases into the budget is determining when they will be needed. This involves knowing how long things can be expected to last. Given this information, the replacement of those items that will serve for many years can be fitted into the family's long-term planning, those with shorter life spans into the intermediate or short-term plans.

The most expensive item to be replaced periodically is the family car. In the years that a family buys a car, they can expect to devote, on the average, about a fourth of their income to it.

Over the years, however, expenditures for clothing will take more of the consumption dollar than does the purchase of automobiles. Some families may not think of clothing, with the possible exception of such infrequently bought items as winter coats or men's suits, as durable goods, but most items of clothing can be so classed if durables are defined to be goods that last a year or more. Between 10 and 15 percent, roughly, of the average family's consumption expenditures are for clothing.

The third important class of durables that families buy is housefurnishings and equipment. Not all of these purchases can be classed as replacements, however, for even the established family continues to expand its stock of household goods through much of its existence, meeting its needs during its period of growth or filling previously unmet wants and also buying new things as they come on the market. Consumption studies do not give us the basis for estimating what part of expenditures for furnishings and equipment, which average about 7 percent of all consumption

expenditures, are for replacements, but commercial sources indicate that 75 to 80 percent of all sales of such widely owned items as washing machines and refrigerators constitute replacements.

The element of choice in the making of replacements

It may give a discussion such as this perspective to consider two possible classifications of replacements. One such grouping is according to the degree of control the family has over the point in time at which the replacement is made. The other is according to whether the family can plan for replacement on the basis of its own past experience or whether it must draw on other sources of information.

Replacements can be divided into two groups on the matter of timing. Some are inescapable if the family is to continue to have the item in question, others are made at the convenience of the family and can be postponed practically indefinitely. As we live today, the great bulk of replacements fall in the second category. Children may outgrow or out-wear their clothing, the family car may be demolished, and the refrigerator may break down, but balanced against these are many replacements that are purely a matter of choice. The phrase, "built-in obsolescence," was coined to describe the modern automobile and our attitude toward it. The TV set may go out to make room for a larger screen or for color. The overstuffed living room set may give place to something more streamlined and "modern" even though its springs and upholstery are intact. The old refrigerator that is still in working order but has no frozen food compartment may be traded in for one that provides for frozen foods. Clothing may be considered "worn out" when it gets a little shiny at the seams even though otherwise serviceable, or it may be discarded simply because its wearer is tired of it or feels that the maintenance of status requires that a garment be worn only so long. And, of course, fashion terminates the life of many garments in women's wardrobes.

How such considerations affect the length of time that an item is kept in use by one owner can be read into the estimates of service-life expectancy developed by the Household Economics Research Division (table 1 and first chart). These estimates reflect the current practices of families in making replacements and should therefore not be interpreted to indicate the period the item could be made to serve if it were used until completely worn out.

Washing machines provide a case in point. The rural and urban segments of the population do not act in the same way. Rural families keep wringer and spin-dryer machines longer than automatic ones, but urban families reverse this practice and use non-automatic machines a shorter period of time than automatics. The key to this difference is in the water requirements of the automatics. These are the preferred machines, and many families do not wait until their manually-operated machines are worn out.

to switch to the labor-saving automatics. But many rural families do not have enough water to be able to use an automatic. They therefore do not have the same motivation as urban families to dispose of manually-operated machines that are still in working order.

Automatic machines currently have a shorter life span under one owner in rural than in urban areas. This again can probably be traced to their greater water requirements. It is probable that their relatively short life in rural areas results from purchases by some rural families who do not have a sufficiently large water supply, have found them unsatisfactory as a consequence, and have gone back to manually-operated models.

The differences in estimates of the life span of washing machines obtained from data collected for successive years also points up the degree to which consumers have control over the timing of replacements and the economic implications of this control. These data must be interpreted with caution since we have only two observations at this time and there is some sampling variation in each estimate, but these estimates are in general agreement with the sales data for the period covered by them.

The estimates show that families were inclined to keep their washing machines longer in 1957 than in 1956, and the sales data show that sales fell off during 1957. There are two possible interpretations of these data. One is that as a result of the recession consumers were unable to afford replacements which they might otherwise have made. The alternate interpretation is that consumers chose to postpone replacements to have money for other uses and that the consequent drop in sales of durables contributed to the recession. In this connection it is of interest to note that the farm segment of the population, which was relatively well-off in 1957 as compared with earlier years, did not stretch the service life of their wringer and spin-dryer machines in 1957 as did the urban segment. And, while the estimate of service life for automatics in rural areas obtained from the 1957 data is greater than that from the 1956 data, it is possible that this is due at least in part to the dissemination of knowledge in the rural community as to the water requirements of automatics.

The control that consumers exert over the timing of replacements results in there being wide variations in the data these estimates are based on. Not only are the short life spans of the "lemons" that break down early averaged in them with the long life spans of the items that appear to wear "forever," but the practices of people who must always have the latest thing are balanced over against those of others who "get the last bit of good" out of their durables. Just as average expenditures should not be incorporated into a budget without regard for the needs, the preferences, and the goals of the family for whom the budget is being made, so these life expectancies should be modified to suit the habits of the particular family. Unfortunately we cannot present any guides as to the amount of variation contained in the estimates. We can say, however, that of the items discussed in this paper, it is greatest in the field of furnishings and equipment, and least for children's clothing, most of which is given up by the wearer either because it is outgrown or outworn.

The element of experience in planning for replacements

We have all heard it said that the consumer is at a disadvantage in buying the long-lived items of furnishings and equipment because he is called upon to make such purchases so seldom he has no body of experience on which to base his judgment; Table 1 and chart 2 bear this out. We estimate that the shortest-lived of the items we have studied, the washing machine, will serve the original owner 9 years, on the average, and that the longest-lived, the upright vacuum cleaner, has an average life span of 18 years.

This being so, few consumers are going to have experience with enough vacuum cleaners, or even with enough washing machines, to be able to form a sound estimate of how long each will last. If the family is to develop a long-range plan that provides for the replacement of these items, it must have some guidance from outside as to what it can expect of its equipment.

Clothing, on the other hand, is distinguished by a relatively short life span. The various items are bought frequently enough that the family can perceive its own buying patterns. It can, therefore, in most cases budget on the basis of its own experience. It needs to turn to patterns generalized from the experience of many only in exceptional circumstances--when it is in a state of change or when it is dissatisfied with its money management and wants to examine its spending against the patterns of others.

Certain generalizations as to clothing practices can be useful here. Persons who spend more on their clothing and who want and can afford relatively large wardrobes tend to turn them over more rapidly than do those who spend less and have smaller wardrobes, even though they have more garments to share the wear (tables 2 and 3). Older adults in particular tend to have smaller wardrobes but to make their clothing last longer than do younger adults.

A child's garments have shorter life spans than an adult's because he is growing and is more active (third chart). Consequently the size of his wardrobe is less important in determining how long he will wear his things. As he gets older, his wardrobe will tend to be more extensive but the rate of turnover will remain just about the same throughout childhood and adolescence.

In our studies we have found that low turnover is associated with a cool climate and the white collar occupations. We have also found that women tend to keep their garments a shorter time than men when these conditions exist and when income is high, but under reverse conditions they keep them as long or longer than men. In this connection attention might be called to a somewhat similar finding in many expenditure studies--that at high income levels women spend more than men for clothing but at the lower end of the income scale they spend less.

More investigation is needed before these relationships can be fully explained. Differences in the types of garments owned and their durability in relation to the stresses of wear and maintenance to which they are subjected are undoubtedly important. To indicate the complexity of the problem the average life span of several garments in the two groups that differ most as to total turnover might be examined.

Life span of garment in --

Item:	Minneapolis- St. Paul (years)	South Central Kentucky Rural Development area (years)
Men		
Overcoats, topcoats.....	6.8	5.2
Work trousers.....	2.9	1.9
Work shirts.....	3.3	1.9
Street shoes.....	3.8	2.5
Women		
Heavy coats.....	5.2	5.2
Dresses.....	2.6	2.8
Street shoes.....	2.7	2.0

We find that the urban Minneapolis-St. Paul men are wearing each of these selected garments longer than the open-country Kentucky men. The two groups of women tend to wear their coats the same length of time, the Kentucky women wear their dresses longer than their Minneapolis-St. Paul counterparts, but the reverse is true as to shoes.

Derivation of estimates

The estimates presented in this paper have been obtained by two methods. Those for equipment and rugs have been developed using actuarial techniques. Data for the project were collected by the Bureau of the Census in conjunction with the Current Population Survey. Questions asked of the approximately 17,500 respondents in each of the two years in which the survey was made concerned the ownership of selected items, the age of such items, and provided some descriptive information. Respondents were also asked whether they had discarded any of these items in the past year, and if they had, the age of the item and the same descriptive information. The responses were tabulated in the form of age distributions of items currently in the inventory and items removed from use within the year. These tabulations are the basis for life tables similar to those constructed for human populations. From these life tables can be read the service-life expectancy of an item at the time it is put into service, or the average period of time the item will be retained in a given household under present conditions of use.

This method of determining the length of time consumers will keep items in use has the advantage of reflecting all the factors that affect the life span although the factors themselves and their roles are not identified. In the discussion of washing machines above, the advantages and limitations of the equipment, the effect of the economic cycle, and the competition of other goods for the consumer's dollar were cited as factors affecting the life span. Other factors that may affect life expectancy are fashion, availability, cost of satisfactory repair service, changes in family and ways of life.

Large samples are needed to derive these estimates of life expectancy under one owner. This is particularly true when the item being studied has a relatively long life span, for in that case fewer replacements will be reported. The actuarial method of obtaining estimates of life expectancy can be applied only when at least one "generation" of an item, one "model year," has lived its life and the last, or approximately the last, member of the generation has been removed from service. Consequently reliable estimates of the life span of items put on the market only recently cannot be obtained with it.

This method can be used only when reliable estimates of the age of items in use and of those discarded can be obtained. It can therefore be applied only to items important enough from the standpoint of cost or other considerations for the respondent to remember their age. It cannot be applied to items that do not retain their individual identity in the sight of the consumer--sheets, for instance, or many other household linens. To these rather anonymous items the old saying, "Out of sight, out of mind" might be applied. It is to be doubted whether most housewives could report reliably on the number of such items discarded within the year, much less on their age.

A much more reliable method for estimating the life span of such items is by means of an inventory-acquisition ratio. This is the method used in this presentation to estimate the life span of clothing. If, for example, as in the Kentucky survey, women report owning an average of 1.6 winter coats and acquiring an average of 0.3 winter coats in the schedule year, and it is assumed that these figures represent normal levels of inventory and rates of acquisition, it can be concluded that they keep their winter coats slightly more than 5 years, on the average.

The data required by this method are limited to counts; moreover they are the counts that can be reported most accurately. The method has one major drawback, however. It gives a reliable estimate only when inventories are being maintained at a constant level and there is regularity in the pattern of acquisition. In a period when stocks of an item are being built up, this method will underestimate the life span, and when stocks are declining overstatement results. It can be assumed, however, that in most situations there is little short-range change in inventories and acquisitions of clothing or household textiles as a whole although there might be change in regard to some items.

As a convenience in generalizing about clothing practices, to avoid a consideration of all of the many garments composing the wardrobe, the rate of turnover within the wardrobe as a whole has been used in comparisons. This rate is derived from the average life of all garments in the wardrobe. To compute this average so that the relative importance of the various items in the wardrobe is taken into account--so that an overcoat has more weight in the final figure than a shirt or pair of hose--articles in the inventory and acquisitions have been summed, weighting the counts of garments by the average price paid by the group for that garment. The inventory-acquisition ratio for these total wardrobe figures is then computed in the same way as for the individual garments.

Conclusion

Estimates of the life span of practically all consumer durables (the exception is goods recently put on the market) can be developed using these two methods. The Household Economics Research Division currently has a project to develop estimates of service-life expectancy of house-furnishings and equipment under one owner which will expand the list of items covered in table 1 and also investigate further variations over time and between population groups. Some clothing inventory data are available for use in deriving estimates of the life span of clothing. More are needed.

Using data of these kinds, the family interested in planning for the future can set up a long-term budget tailored to its needs and preferences. The estimates for equipment will tell them approximately how long their present equipment can be expected to last and when replacements must be fitted into their spending plans. In using these estimates, the family must allow for variation in the service seemingly identical items will give and also relate their own situation to these generalizations from the experiences of many families. Will they give their equipment harder or lighter wear, better or poorer care, than the average? Will they be content to use it up or will they want to replace it while it is still comparatively "young"? Does it seem probable that they can continue to use it through a normal life span, or will it fail to meet changes in their situation that they can now foresee?

Having decided when the replacement will probably be needed, they can then lay plans for it. If their income is low and the replacement cost high in proportion to it, they may want to lay aside part of the estimated cost each year so as to have the money when it is needed. A larger budget may permit the purchase of one or more pieces of equipment or major furnishings a year and the problem will be one of scheduling. Or the family may weigh this and other needs against their income and decide that having the replacement is worth paying the extra cost of buying it on credit.

The clothing estimates will indicate what the family can expect in the future. For the family with growing children, these estimates will provide basic data outside their present experience. For the adults in the family, they will indicate modifications in their present practices that the future will probably bring. Such information may be particularly valuable when the family faces a change in its situation such as retirement or a move from farming to urban living.

Table 1.--Estimates of service-life expectancy of selected items of furnishings and equipment

Item and condition at acquisition	Estimates based on data for the year	All U. S.	Urban	Rural		
				All	Nonfarm	Farm
Electric washing machines			Years	Years	Years	Years
Automatic and semiautomatic						
New.....	1957	11	11	9		
New.....	1956	9	10	8		
Used.....	1957	5				
Used.....	1956	4				
Wringing and spin-dryer						
New.....	1957	10	10	10	9	11
New.....	1956	9	9	10	9	11
Used.....	1957	6	6	6	5	
Used.....	1956	5	5	5		
Electric refrigerators						
New.....	1956	15	15	16	15	17
Used.....	1956	8	8	8		
Electric ranges						
New.....	1956	15	16	13		
Used.....	1956	6	7	6		
Gas ranges						
New.....	1956	15	16	13		
Used.....	1956	8	8	8		
Vacuum cleaners						
Upright						
New.....	1957	18	18			
Used.....	1957	8	8			
Tank						
New.....	1957	15	15	15	14	
Wool living room rugs 1/						
New.....	1957	14	14	14		

Estimates shown only when warranted by the completeness of the distributions.

1/ 8 by 10 feet or larger, including wall-to-wall carpeting.

Table 2.--Relative wardrobe size and average turnover, by selected characteristics, husbands and wives in families with 0-2 children, Minneapolis-St. Paul, 1948-49

Characteristics of individuals	Husbands		Wives	
	Weighted quantity of the inventory 1/	Weighted average life span of all garments	Weighted quantity of the inventory 1/	Weighted average life span of all garments
	Percent	Years	Percent	Years
Family income				
Under \$2,000.....	100	7.5	100	5.1
\$2,000-\$2,999.....	118	5.2	123	3.6
\$3,000-\$3,999.....	129	4.6	130	3.5
\$4,000-\$5,999.....	159	4.3	155	3.4
\$6,000 and over.....	210	4.2	191	3.7
Age (years)				
Under 30.....	100	4.4	100	3.2
30-39.....	101	4.1	101	3.3
40-49.....	101	4.1	97	3.6
50-59.....	98	5.9	85	4.3
60 and over.....	88	6.4	71	5.5
Family size and composition				
No children.....	100	5.2	100	3.8
1 child.....	96	4.3	105	3.5
2 children.....	96	4.0	94	3.4

1/ Presented as a percent of the first cell in each classification.

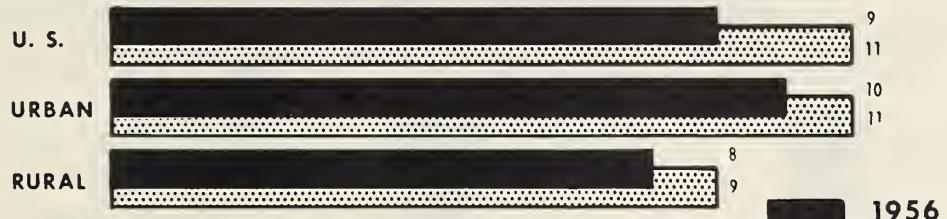
Table 3.--Annual clothing expenditures per person and turnover within the wardrobe, open-country families in a Rural Development Area in South Central Kentucky, 1956-57

Persons grouped by annual clothing expenditures	Men 1/		Women 1/	
	Annual expenses	Weighted average life span of all garments	Annual expenses	Weighted average life span of all garments
	Dollars	Years	Dollars	Years
Lowest tercile.....	19	4.2	12	3.7
Middle tercile.....	52	3.2	44	3.4
Highest tercile....	121	2.2	131	2.8

1/ 16 years of age and over.

LIFE SPAN OF DURABLES VARIES Expected Years of Use by One Owner

AUTOMATIC WASHING MACHINES [△]



OTHER WASHING MACHINES [○]



WHEN ACQUIRED NEW, ELECTRIC ONLY

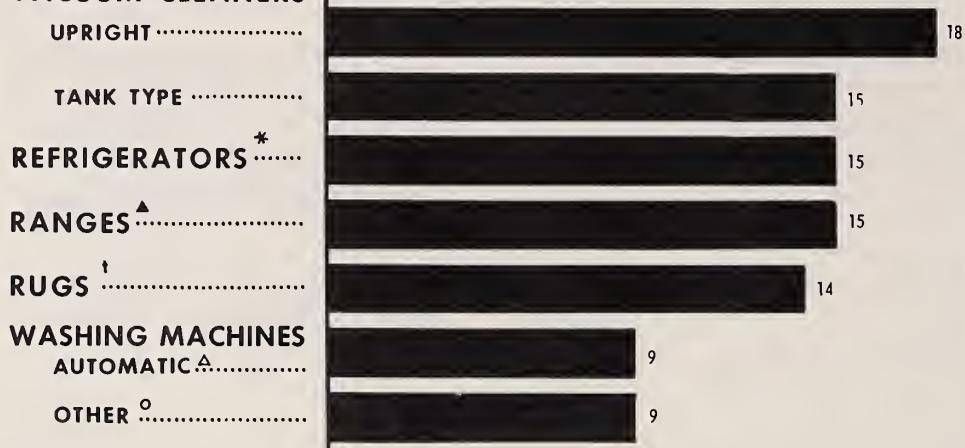
△ INCLUDES SEMI-AUTOMATIC

○ WRINGER AND SPIN-DRYER

LIFE SPAN OF HOUSEHOLD DURABLES

Expected Years of Use by One Owner

VACUUM CLEANERS



WHEN ACQUIRED NEW; VACUUM CLEANERS, RUGS - 1957 DATA, OTHER - 1956 DATA
▲ GAS, ELECTRIC * ELECTRIC

CARPETING † LIVING ROOM, WOOL, 8 X 10 FEET OR LARGER, INCLUDING WALL-TO-WALL

△ INCLUDES SEMI-AUTOMATIC

○ WRINGER AND SPIN-DRYER, ELECTRIC ONLY

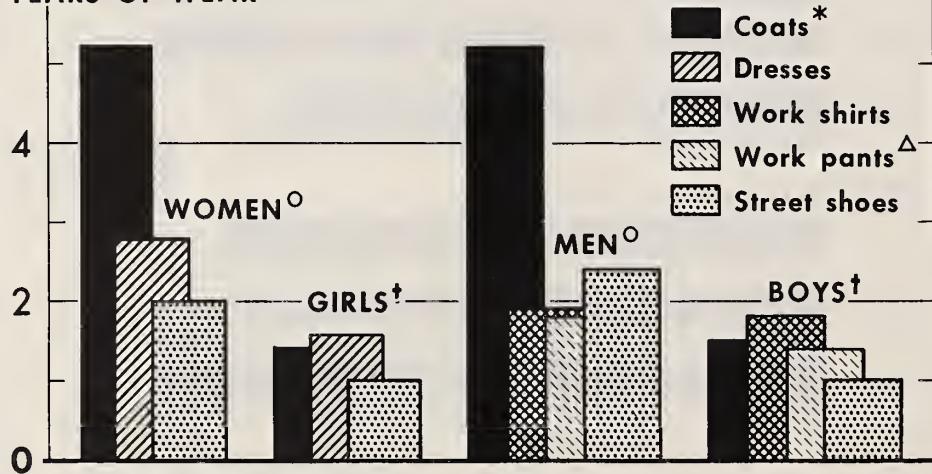
U. S. DEPARTMENT OF AGRICULTURE

NEG. 58 (9)-5572 AGRICULTURAL RESEARCH SERVICE

LIFE SPAN OF CLOTHING

Rural Families in a Low-Income Area

YEARS OF WEAR



IN OPEN COUNTRY, KENTUCKY, 1956-57

* WOMEN, HEAVY COATS ONLY; MEN, OVERCOATS, TOP COATS

○ 16 YEARS OF AGE AND OLDER † 2 TO 15 YEARS OF AGE

△ INCLUDES OVERALLS, JEANS, ETC.

U. S. DEPARTMENT OF AGRICULTURE

NEG. 58 (9)-5574 AGRICULTURAL RESEARCH SERVICE

PRIVATE ACTION TO FACILITATE RESOURCE ADJUSTMENT

Opening Remarks for the Panel Discussion on
The Outlook for and the Impact of Resource Adjustments on Agriculture

By Earl O. Heady, Professor, Department of Agricultural Economics
and Rural Sociology, Iowa State College

At the 36th Annual National Agricultural Outlook Conference
Tuesday, November 18, 1958, Washington, D. C.

The need for adjustments within agriculture, and between agriculture and other sectors of economy, is now great and well known. It is extremely likely that adjustment pressures and needs will grow over the next decade, as the forces giving rise to adjustment also intensify in effect. The two major forces which cause need for adjustment arise both within and outside of agriculture. First, within agriculture, is the rapid outturn and rate of adoption of new technologies. These new technologies within agriculture, which have increased farm labor productivity by over 40 percent since 1940, exert pressure towards three major types of adjustments within the farming industry: (1) They call for larger farms, particularly where they represent increased mechanization and allow the family to operate more acres or animals with the same labor force and/or have higher fixed costs and allow lower per unit costs only as the farm is expanded. (2) They allow the same labor force, particularly those representing biological improvements which increase yield per acre and animal, to produce a greater output; or they allow the same output to be produced with a smaller labor force. Since food demand increases mainly at the rate of population increase, and since technology and labor productivity in agriculture have been increasing at a much faster rate, these technologies mean mainly that the "within agriculture force" is causing labor to be squeezed out, or displaced from the industry. (3) They allow a growth in output at a rate greater than the growth in demand, and thus also, suggest a need for shrinking the magnitudes of inputs used.

Second, outside of agriculture, is national economic growth. Even if adjustment forces were not being generated within agriculture, growth in the national economy would still exert pressures in the market, causing the structure of agriculture to change. National economic growth encourages structural adjustment in agriculture for two important reasons. Agriculture in a wealthy, rapidly growing economy will generally be faced with a cost-price squeeze and a relative "dampening" of income. The reason is this: As incomes of consumers increase, food no longer becomes their major concern. They want more home appliances, better housing, television sets, recreation, travel, and education. Hence, as their incomes increase, American consumers spend relatively little more on food. In fact, they don't buy more pounds of food, but simply change the composition of the food purchased. Consumers shift from fats, starchy foods, and similar staples to fresh vegetables, better cuts of meat, fruit, etc. The pounds of food consumed per person has not increased in the last 40 years. Increased expenditures for food, as consumer income rises, is due partly to the purchase of more expensive food, but more particularly to the purchase of extra services which go with food, such as packaging, freezing, etc.

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The income elasticity for food expenditures is about .2, that for each 10 percent increase in incomes of consumers, expenditures for food increase by less than 2 percent (again with most of this going for processing and retailing services for food). The consumer increases expenditures more rapidly on many non-farm products as his income increases. While he increases expenditures on food by 2 percent or less with each 10 percent increase in income, his expenditures on home appliances, housing, travel, etc., increase several-fold. The income elasticity of demand for these goods and services is much higher.

As incomes increase consumers do not place premiums on farm products. In fact, they tend to hold prices of farm products down, saying that they do not need much more poundage of food, except as the population grows and more persons need to be fed. Bidding higher prices or demanding relatively more non-farm foods and services, the consumer also bids up or maintains the cost of steel, labor, petroleum, and other materials used particularly for those non-farm goods with high income elasticities. Consequently, the cost of tractors, lumber, fuel, fertilizer, and other agricultural inputs is kept high. This is a major cause of the cost-price squeeze and the income problem in agriculture. Consumers are saying that with higher incomes and a rapid increase in agricultural technology, they wish relatively more of the nation's resources to be used for non-farm goods, and fewer for farm goods than at present. They are indicating, through the pricing mechanism, that we are producing relatively too much food and too few other things, and that accordingly they want some labor transferred from farming. But while consumers have been saying that they wish only slightly more food per person, output of agriculture has increased more rapidly than consumer demand; with both of these forces acting to squeeze agriculture, in the direction of lower prices and in the direction of higher costs.

This "outside agriculture force," national economic growth, especially encourages two types of adjustment within agriculture: (1) It encourages the substitution of capital for labor, thus changing the structure of inputs or cost items used by the industry. This occurs because, under economic growth in a highly developed or wealthy country, labor is scarce relative to capital items. Wage rates are high relative to prices of material resources. (In underdeveloped countries, wage rates and employment opportunities are small relative to the cost of capital goods.) This has been the situation pressed on agriculture, as well as the one existing elsewhere in the economy. With the price of labor high relative to the cost of capital (in the form of machinery, fertilizer, insecticides, etc.), farmers are encouraged to substitute capital items for labor, and labor is displaced from agriculture. Here, labor is "pushed out" of farming. (2) National economic growth, and the differential rate of demand expansion for farm and non-farm goods, causes wage premiums to exist in non-farm industries. Consequently, farm youth, and even some persons established in farming, seek employment outside of agriculture. Here labor is "pulled out" of agriculture, by favorable non-farm employment opportunities.

The Outlook

The outlook is: these "adjustment generating" forces, from both within and outside of agriculture, will continue. The "within agriculture" force, a technological advance, will certainly continue at a rapid pace, since commercial firms increasingly have interest in promoting it. This is true because

a greater proportion of inputs used in agriculture now come from off-farm sources. Hence, there is greater opportunity and profit for commercial firms which produce these inputs (e.g. fertilizer, feed additives, insecticides, etc. etc.), if they also conduct research and rapidly extend the results to farm adoption. Outlook also is that the "outside agriculture" force, national economic growth, will pick up speed in the next decade; especially as an upward surge in new households formed and in additions to the labor force takes place, paralleling the upward surge in birth rates over the past decade and a half. Accordingly, we postulate that the outlook over the next decade is for continued adjustment of agriculture to the forces outlined above.

Areas of Private Decisions and Actions

We predict that public action will be continued and will be needed, over the next decade; to aid agricultural adjustment and to lessen downward pressure on income in agriculture. However, even though this is true, these programs will only provide a framework within which the private decisions and actions of farm people will take place in respect to resource use. Undoubtedly, we will see price support and production control programs continued, perhaps even under different names than at the present and in the past. Farmers will continue to make decisions and take consequent actions in committing their land resources to these control programs. If they commit their land to them, they will continue to make other decisions and take other actions in respect to labor and capital previously used with land allocated to control programs. Increasingly, with the advent of more improved technologies for agriculture, we would expect that even where decision is made to commit land to control programs, farmers will be able to use labor and capital for other alternatives which will offset the effects of acreage reduction.

Too, we believe that, aside from crops on which marketing quotas are voted and in the absence of extreme breaks in farm income, greater proportion of farmers may refrain from committing their land resources to control programs. The increased commercialization of agriculture and the rapid advent of new technologies favor this trend. The reasons are these; Early adopters who are "on their toes" often gain more by staying out of control programs, and investing their energies and capital in new innovations for their entire land area. Also, as time progresses and management ability becomes increasingly important in agriculture, more and more of the "late adopters" will be, or are being, weeded out of agriculture. These are the operators who gain relatively from control programs, and who are most likely to participate in them.

But even though public action will result in programs on which farmers can make decisions and take action, we believe that the economic trends and adjustments in prospect for the next decade will place more emphasis on, and the need for, private decisions and actions which are geared to the national or over-all economic outlook. In the same vein, the types of adjustment and decisions which will be appropriate and made by private or individual farm families, in gearing agricultural resource use to national economic growth, will call for increased and broadened outlook services for farm people. We believe that the outlook services of the magnitude now furnished farm people are both inadequate and have too narrow a focus, in light of the increased number and importance of private decisions and actions which must be made by farm people over the next decade. This is not a criticism of agricultural outlook work in its present framework. We believe that it is conducted very excellently and

is one of the better public services furnished farm people. However, we do believe that, in terms of the types of adjustments ahead in agriculture and the private decisions which must be made in respect to them, some broadening of general outlook services and facilities is desirable.

Solution of the major structural or adjustment problems now facing agriculture will be solved through decisions and courses of actions selected by individuals and families. This will be true even though we continue public action programs to help stabilize and bolster farm income, to provide needed credit and similar measures. Major adjustments ahead in agriculture involve mainly: a further reduction in the labor force, a smaller farm population, somewhat fewer and larger farms, greater specialization of production, a larger amount of capital per worker. These and a smaller total agricultural output adjustment are not those proposed as a goal or end by this writer. Instead, they are the types of adjustments being encouraged and brought about by both the "within" and "outside" agriculture forces discussed previously.

More than anything else, the structural adjustment of agriculture will be brought about by decisions of young people to enter farming or other industries. In this manner, particularly, the size of the labor force in agriculture will be shrunk. This is the flexible portion of the farm labor force. Farm youth have not yet committed their skills, talents and capital to farming. Neither do they have values, goals and attitudes tied so closely to rural communities, as in the case of older farm persons. An important problem here is to provide outlook and guidance for young people; so that those who have the skills, abilities and capital opportunities for it, can find their way into agriculture. We need more, not fewer, well equipped farm managers in the future. But at the same time we need to provide proper outlook and guidance to the many farm youth who do not have an opportunity in agriculture and whose abilities and preferences will cause them to have greater income and life satisfaction in non-farm occupations. The important need and challenge, on the part of agricultural education organizations, is in providing knowledge that guides farm people into the most promising alternative in life. In this sense, outlook and guidance cannot be separated. We need to provide farm youth with outlook for the future, under continued economic growth. We need to be able to indicate to them, those non-farm occupations which prosper most under economic growth and provide most favorable employment opportunities. We do a disfavor to many farm youth if we withhold this information from them, or encourage them to go into farming when their abilities and opportunities are in other directions; only to find out five years later that they have made a mistake and have wasted, at a crucial time, part of their life.

From the standpoint of outlook, we predict for a sow, what she will be worth in the future; or we can tell her what she is worth at a half dozen different markets. But we do not predict for a farmer's son, his worth at different locations and in different occupations. Which is more important, the sow or the boy?

Similarly, many young married families in agriculture still have some opportunity in choice of occupation. In terms of labor force adjustment, it is farm youth which has the greatest mobility potential. Next in flexibility are young persons who have started farming but who have not pushed their roots deeply into the community, have long working lives ahead and still have enough youth to switch from one skill to another. The challenge here is to use farm and home development facilities to identify those persons who will do best if they continue in farming, but also to identify those who will increase their welfare by occupations

continue in farming, but also to identify those who will increase their welfare by occupational migration.

Farm enlargement

One action now being taken by many farmers is farm enlargement. Data show that in some parts of the Midwest as many as 40 percent of land purchases are for this purpose. This is a method open to those with capital, for meeting the farm price squeeze and maintaining or increasing their income. Many farmers view it simply as a way of offsetting the fact that as economic growth occurs, prices of materials used in farming are high relative to the price of farm products; and a greater output "makes up" for a smaller profit per unit. But more look upon it as an opportunity for using their existing labor and machinery resources more effectively. In the major corn and wheat regions, for example, the typical farm family has enough labor and machinery for operating half again as many crop acres, perhaps with use of a little custom or seasonal help. Since little or no machinery and labor must be added, only real estate and variable costs are necessary for the additional land. Hence, the profit per acre is greater than for the original acres, because the fixed costs of machinery and labor need not be duplicated. Too, the development of larger capacity field equipment and such technologies as bulk-line milk operations, with high fixed costs or small volumes but lower costs per unit on large volumes, encourage these trends. In fact, it is the lower costs and greater profits on acreages added to existing units which cause farm land values to climb at a time when prices and income are depressed.

Decisions to expand operations and action to accomplish this goal is, of course, only in the hands of those operators with sufficient capital and managerial ability. In some regions of the United States, such as the corn and wheat regions, many farmers have these resources; and the major obstacle is in finding land which they can buy at a reasonable price and in a sufficiently close location. These opportunities are not always at hand and adjustments in farm size can only be gradual; as other farmers sell land at the time they retire, shift to other occupations, etc. However, in other locations, particularly the low income sectors of agriculture, lack of capital acts as a restraint in expansion of farms to sizes which will provide adequate income under the economic growth trends in prospect. Too, some operators who have been operating inadequate units may lack the managerial skills necessary for larger scale and more specialized commercial operations. These restraints might be overcome by contract farming which provides the operator both with capital and managerial services; or by greater agricultural extension services in the form of farm and home planning and by improved credit facilities. Integration or contract farming over major areas of agriculture is a prospect mainly for expanding scale through intensification; such as adding more livestock or poultry on existing acreages, rather than in expanding acreage per farm. We do not, however, predict that integration will spread over the major part of agriculture; or, that it is a private action which can solve current types of adjustment ills in the industry.

While trends towards larger farms, resulting from the decisions and actions of individual farm families, can help solve problems relating to the resource mix and pricing problems of agriculture over the long-run, they hold little promise for solving the more serious short-term surplus and income problems.

As the labor force in agriculture continues to decline, small farms especially need to be consolidated into larger family farms. While larger farms also can and do expand, labor productivity is generally higher on these units. The greatest need is for expansion of smaller units which generate insufficient income and which result in great underemployment of labor. From the standpoint of both labor productivity and income distribution, consolidation of two or more undersized units would be preferable to having a large farm annex a small one. However, two major difficulties stand in the way; One is the spatial characteristic of farming. Generally, a contiguous acreage, or one relatively nearby is preferred for consolidation. If a small farm being abandoned is contiguous to a large one, it is more likely to be added to the large unit rather than to another small unit at some distance. The other difficulty of consolidating two small farms is capital. Operators of larger units more often have the capital for adding acreage. Families with few assets who operate small acreages are less able to bid for consolidation, even though their labor is highly underemployed. More typically, in an area of industrial growth, low income families turn to part-time farming rather than to farm expansion as a means of augmenting income.

The net short-run effect of reductions in total labor input, and consequent increase in farm size, is to augment agricultural output. Families leave farming mainly because of natural causes (death, age, health) and economic forces (comparative monetary or real income). Farm consolidations, arising as families leave agriculture because of economic forces, present opportunities for increasing output since relative income disadvantage is greatest for operators who possess small amounts of capital and managerial skills. As they leave agriculture, the farm most frequently is consolidated by a neighbor who generally has more capital and management ability. He can operate the added acreage with the same efficiency as his previous unit. He uses more fertilizer, improved varieties and other practices that increase yields. Illustrating these possibilities, is a study by the writer and Randall Hoffman, in Iowa. Farms consolidated typically are operated by remaining farmers, with only a slight increase in labor and capital of their own; the total employed on the combined units being less than for the separate units. Remaining operators apply more yield-increasing techniques and have higher yields than those who leave agriculture. The net effect is more output from the same acreage, and with less labor and capital in total. Further trends towards larger farms and a smaller labor force in agriculture also will have differential effects on three groups in agriculture. Included in one group are persons who move from farm to non-farm employment. If they possess insufficient capital and operate inefficient units, transfer to other employments can increase their income. Second is the consolidating group that remains in agriculture. If they intensify techniques and expand farm size to reduce unit costs sufficiently, relative to decline in product prices, they also gain from a reduction in farm numbers and the labor force. Third is the group that remains in agriculture and is unable to expand farm size. Their relative position will be depressed further if commodity prices continue to decline relatively, because of continued growth in output (from new innovations and further technological improvements resulting from consolidation). This group includes mainly families unable to adjust because of age, health, skills, capital limitations, lack of knowledge and similar considerations. The typical "beyond middle-aged" farmer perhaps falls in this group. It is this group of older operators, especially where they lack capital and managerial skills, which has least opportunity for improving their income position through their own private actions.

Cost reduction

Reduction of costs for output in present volumes is a main opportunity for people who have no prospects for off-farm employment or expanded scale to lower per unit fixed costs. Undoubtedly there are many opportunities for this type of adjustment on American farms, whether they are large or small. This is desirable farm management, just as is better selection of enterprises to increase profit. It involves a more careful examination of possibilities in credit sources, in combining field operations and in substituting one machine or resource for another when relative prices are favorable. But while, as a "belt tightening" measure, it can make additions to incomes of individual families, it is not a solution to the surplus problem or in all cases, to the oversupply of labor in agriculture. Still on larger commercial farms, cost reductions brought about by substitution of capital equipment for labor is exerting an even greater pressure for occupational and geographic migration of labor.

Other "Within Agriculture" Actions

Other opportunities for private action are open to families within agriculture. While these may improve the income position of the individuals concerned, they will not always solve the mass problems of agriculture. One is to become more specialized in the products produced and to increase management efficiency. Technical developments such as multiple hog farrowings throughout the year, bulk-tank cooling of milk, mechanized systems of cattle feeding, improved and more scientific livestock rations and larger capacity field machinery will encourage farms to be more specialized and to employ more specialized management. As agriculture continues to increase in degree of commercialization and competition, these trends may become more of a necessity; rather than simply an opportunity. In this framework, it will be increasingly important, for success in farming that individuals who profit must adopt new techniques before the masses of farmers do. Gradually, over the years, the time span in rate of practice adoption is narrowing between innovators and followers.

Another opportunity in individual action is part-time farming. This is an operation which has grown rapidly in industrial regions. It can represent an opportunity to accumulate capital from off-farm earnings, to become more fully established in farming at a later date. Or, it can serve simply as a means of supplementing income. Over a longer period of time, however, part-time farming is simply a transition stage, in moving from a rural to an industrial economy. Opportunity for it can expand only at a rate allowed by local economic growth and expansion in employment outlets. In some agricultural regions with important adjustment needs, industrial and part-time farming growths have been quite rapid, and will likely continue so in the future. Examples are part of the Southeast and the eastern Cornbelt. Other large agricultural areas with important adjustment problems do not have a similar opportunity because local industrial growth is absent. Most of the Great Plains wheat area falls in this category.

The adjustments outlined to this point and which result from private decisions are those which will take place in either the presence or absence of public action programs; perhaps at a little slower pace with programs. They are the major types of shifts in sight if agriculture is to have (1) a resource and producing structure which is consistent with national economic growth and (2)

incomes in agriculture which compare favorably with other employment opportunities. However, one other major adjustment also is needed: bringing total output of agriculture into line with national demand. If this were accomplished optimally, in terms of comparative advantage and location of demand, it would entail regional shifts of land and other resources from surplus to other crops. Areas of limited moisture and low yields should, for example, shift from wheat and feed grains to non-surplus crops. A study conducted by this writer and the Farm Economics Research Division of U.S.D.A. indicates that about 30 million acres would need to be shifted from feed grains and wheat, if we were to eliminate the surplus problem; and if land withdrawal were made entirely in regions where costs are high and yields are low relative to demand and market opportunities. This method of shifting land, or soil areas or regional basis to cut down on surpluses, is more realistic than attempting to shift a small acreage on millions of farms over the entire nation, regardless of their comparative advantage in producing crops. While it is greatly needed, it is not a type of adjustment which can be made readily without public programs. The reasons are these: Land values are at levels supported by grain prices in postwar years, and by government programs in recent years. If all farmers in a particular region were to shift from wheat to grass, for example, they might sacrifice an important part of their assets, in the form of lower land values (especially in the absence of government subsidies). Many crop farms which provide reasonable incomes under present land use and government programs would be too small to provide adequate incomes under less intensive operations such as grazing. Finally, the cost of shifting from wheat to grass, for example, is costly in terms of income foregone while grass stands are being established over a period of several years. Some farmers are in a financial situation to take these steps, and a few are doing so. However, any large scale shift in this direction needs the aid of public programs to overcome the problems cited previously.

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE

PROSPECTIVE CHANGES IN THE STRUCTURE OF FARMING

by Kenneth L. Bachman, Assistant Director,
Farm Economics Research Division 1/

My subject on this morning's program has to do with prospective changes in the structure of farming - by which is meant the way United States agriculture is organized, the sizes and types of farms, the ownership of resources, farm credit, and the interrelationships between agriculture and the rest of the economy. These aspects imply a certain form and rigidity. Although changes occur in these aspects, they do so slowly and unevenly.

What are some of the changes that are developing in the structure of agriculture? To answer this question intelligently, analysis within some kind of framework of assumptions is required. This talk is predicated on the following assumptions:

- (1) The general economy and the total population will continue to grow at a pace in line with the Department's projections for 1975.
- (2) The technological revolution in agricultural methods will continue.
- (3) Levels of real incomes will rise and there will be neither war nor severe depression.

With these assumptions and with 1975 as a general target, I shall discuss the prospective changes in the structure of farming.

It should be pointed out in the beginning that the basic trends now under way foreshadow many of the changes in the structure of agriculture that we may look for in the next 20 years. This will become more apparent as we look at some of the major trends. I have selected three of these for special emphasis. (1) The increase in the size of farms; (2) the growing specialization in agriculture; and (3) the emerging mixed-income community. The first two of these changes relate primarily to commercial farms. The third relates to the entire agricultural community.

Increase in Size of Farm

The last two decades have seen an unprecedented increase in size of farm. Since 1940, the volume of sales per commercial farm has more than doubled. Using 1954 prices, the average volume of farm products sold has increased from \$4,000 in 1940 to more than \$9,000 in 1958. This increase in size is rooted in concurrent technological developments. As farmers shifted from animal to tractor power and began to use a steady stream of improved farm machines, they found that they could handle larger acreages of crops and greater numbers of livestock. At the same time, use of technology made possible substantial increases in output per acre and in per unit of livestock.

This change in size of farm is by no means over. Each year machines that further reduce labor requirements are developed. Even more important, the present size distribution of farms indicates that there is substantial room for further increase in size (fig. 1). In 1954, about 1.8 million, or nearly 60 percent, of our

1/ Presented at the 36th Annual National Agricultural Outlook Conference, November 18, 1958, Washington 25, D. C.

commercial farms remained in the income classes with sales of products less than \$5,000. For cotton and other field-crop farms, the percentage runs above 80.

Of the 3.4 million farms with volume of sales of less than \$5,000 in 1939, about 400,000 had moved into higher income groups by 1954. About 1.1 million of these farms had been converted to residential or part-time units, or the families had left agriculture. Perhaps even more important, after World War II, the number of farms with a volume of sales of \$5,000 to \$10,000 began to decline.

Some of the reasons for these trends become apparent if we examine the volume of sales required for specified incomes. Ordinarily, in a modern environment, a volume of sales of even \$5,000 is too small to provide either net incomes comparable to those of nonfarm occupations or levels of efficiency that will compete with somewhat larger units. A large decrease in production costs per unit is usually achieved in going from a farm that produces for sale farm products worth, say \$5,000, to one that produces products worth, say \$15,000.

Recent studies of resource use indicate that in several type-of-farming areas sales of more than \$12,000 would usually be needed to provide incomes of \$3,500 to operator and family labor (fig. 2). This is not a high income level. For example, it is about \$500 below the median earnings of semiskilled workers in industry. Perhaps more important, earnings in nonfarm employment have risen each year; by 1975, they are assumed to increase nearly 50 percent.

The increase in output per farm has been associated with similar large increases in volume of capital used in production. Total output per unit of capital is only slightly higher than it was in the early 1940's (fig. 3). This means that with the same capital per unit of output, the farmer has been able to double his product. The increase in farm size has meant more capital in the form of land and buildings and an even more rapid increase in the amount of capital in machinery and equipment.

The increasing amount of capital needed is likely to have far-reaching effects on the structure of an industry like agriculture. Agriculture has been characterized by family farms, and the formation of new capital has been almost entirely from earnings within the industry and largely by the operator himself. The problem of individual financing and entry into the industry become increasingly significant. In turn, these problems are likely to affect the kinds of family farms we have in 1975 and the arrangements that farmers use to gain control of resources.

Agriculture appears to be in the very middle of revolutionary changes in its size and capital structure (fig. 4). In 1954, sales per commercial farm, as reported by the census, averaged about \$7,600. The estimated investment in land, buildings, livestock, and machinery averaged about \$34,000. If we assume that current trends in numbers of farms will continue and the volume of output will be consistent with prospective demands in 1975, the volume of sales could be expected to rise to nearly \$17,000 per farm. 2/

2/ The number of commercial farms in 1975 was projected at 2 million as compared with 3,100,000 in 1954. The projections were based on a continuation of the trends in number of farms by economic class at constant prices for the 1939-54 period except for class III farms. Projections of numbers of class III farms assume that the 1949-54 rate of decrease in number of farms would about double in the 1954-75 period. For more detail on number of farms by economic class, see "Family Farms in a Changing Economy," by J. V. McElveen, U. S. Dept. Agr. Inform. Bul. 171, March 1957, p. 19.

Assuming a 10-percent increase in output per unit of capital, the projected investment per farm would about double for the 1975 volume of sales. In terms of 1954 prices and land values, this would mean an investment of around \$68,000 per commercial farm. In terms of 1958 dollars, it would run above \$80,000. Total investment would be somewhat larger because of the need for operating funds. Even these projected changes in capital and size structure, however, may not be sufficient to provide income levels comparable to those in nonfarm occupations in 1975.

The probable rapid increase in farm capital assets raises the question as to whether enough capital will be available in the right places, at the right times, and on appropriate terms to finance the changes in size of farm that appear to be desirable from an economic standpoint. An associated question is whether changes in devices for attracting capital may be needed.

In the past, agriculture has financed most of its growth in capital from savings. From the standpoint of agriculture as a whole, Tostlebe estimated that during the 1940-49 period, 90 percent of the new capital came from savings of farmers. ^{3/} It has been estimated that from 1946 to 1955, inclusive, only approximately a third of the total expenditures of farmers came from borrowing from all sources. ^{4/} There appears to be good reason to expect that the proportion of capital financed by credit will increase substantially in the future.

There appears also to be general agreement that the larger capital loans will require more emphasis by farmers and lenders on the total credit needs of the farm and the likely effects on income. This will probably mean that educational and service agencies will need to work more closely with farmers in developing sound business plans.

One specific, and perhaps controversial, device for obtaining control of land with a minimum downpayment is the land-purchase contract (fig. 5). This instrument differs from conventional mortgage financing chiefly because the title remains with the seller until all payments are made, or until a specific percentage of the total price has been paid. Downpayments of less than 30 percent are required if the seller is to receive special tax treatment of capital gains. Such terms of purchase are attractive to buyers who do not have sufficient equity to obtain mortgage financing. Purchase on contract, however, usually entails greater risk for the buyer than does mortgage financing.

Whatever the pros and cons, the proportion of land purchases that are made on contract has about doubled since the end of World War II. Contract purchases have become an important type of financing in some of the Corn Belt and Lake States and in the Northern Plains, Mountain, and Pacific regions.

Looking forward, questions as to new types of farm financing arise. Will the growth in capital requirements encourage modifications in agricultural financing in the direction of methods now common in industry? For example, should devices for more or less permanent funding of mortgage debts be developed? Would increased equity financing be desirable? Arrangements to share capital investments among farmers may become more important also.

^{3/} Tostlebe, A. S., Capital in Agriculture, National Bureau of Economic Research, 1957, p. 19.

^{4/} Garlock, F. L., Financing Farm Adjustments, Journal of Farm Economics, Vol. 37, No. 5.

Changes in land-tenure arrangements are another means by which the problem of gaining control of resources can be reduced. The most significant trend of this type apparent in recent years is the rising importance of part owners. The proportion of land in farms that is operated by part owners increased from 28 percent in 1940 to 41 percent in 1954. Although the proportion of all land that is rented has remained essentially unchanged since 1945, full tenancy and full ownership has been replaced to an appreciable extent by part-owner arrangements. In those sections of the United States in which farm size has increased most, part ownership is the dominant tenure form.

The continued increase in size of farm leads us to the question of what effects the changes in capital requirements are likely to have on the family-farm structure of agriculture. By family farm, I mean here a system of farming in which, except for high seasonal labor peaks, most of the functions of labor and management are combined in the same individual or family. Before answering this question, let's take a look at the present situation (fig. 6). A large percentage of our farmers hire no labor. Only 10 percent reported one or more regular hired workers. Less than 2 percent reported 3 or more regular hired workers.

In the last two decades, technological changes have permitted a large increase in the size of farms, but hired workers now make up about the same proportion of employment in agriculture as in 1940. For the bulk of agriculture, efficient levels of operation do not seem likely to go far beyond the labor force of, say, the farm family and one or two hired workers. In the Corn Belt, the importance of hired labor has declined. In the West, however, it has increased considerably.

From the standpoint of labor requirements, and assuming reasonably favorable institutional policies, family farms can probably be expected to continue to be the dominant form of organization in American agriculture. The main problems may lie in the conditions that govern managerial control of farm operations and the kinds of family farms that emerge.

The increased capital requirements may affect most the kinds of family farms that develop. Partly because of the rapid reduction in number of farm operators, farming has been and is likely to continue to be a hereditary industry in the sense that new farmers are mainly the sons of farm operators. But in the past, in most areas, it was possible for able farm youths with limited capital to get started in farming. The increased capital requirements raise a question as to whether this situation can continue to exist. It also raises the question of whether growth in capital requirements of farms will make necessary changes in public and private credit policies and methods of financing. In certain areas, it may encourage vertical integration that could modify the controls exercised by the farmer. I shall return to this point later.

Growing Specialization in Agriculture

Agriculture in the United States has always been an industry in which individual units commonly carry on several enterprises. But a definite trend toward product specialization has occurred in recent years. The number of major enterprises per farm dropped about a fourth from 1940 to 1954 (fig. 7). Many farmers have eliminated small home-use enterprises, such as the family milk cow or the small flock of chickens. Others have stopped producing feed for workstock. At the same time, a number of farmers have found it profitable to specialize in the commercial production of a relatively few enterprises, frequently to better utilize the large capital investments needed. Specialization in dairy farming, for example, is increasing significantly.

Even more important has been the growing specialization of farmers in certain phases of farm production. Specialized nonfarm industries produce inputs for farmers or furnish marketing and processing services formerly carried out on the farm. Most dramatic has been the growth of large-scale industries to produce inputs for farm use. Farming itself can now be called a "nonfarm input industry." More than half the inputs used in agriculture now come from nonfarm sources and the percentage has increased sharply (fig. 8). The proportion of total inputs represented by nonfarm inputs has increased from about a third in 1940 to more than half in 1958. These nonfarm inputs include machinery, fertilizer, pesticides, gasoline, feed additives, and other services now produced in the nonfarm sector. They have substantially replaced farm land and farm labor in the production process.

Agricultural and industrial sectors thus are becoming increasingly interdependent. This interdependence involves several facets.

The first is a structure of costs that encourages continual increases in output per farm, per worker, and per animal. Modern farming is characterized by situations in which costs of additional production are often low compared with average costs. Because the demand for farm products is inelastic with respect to both price and income and the cost of nonfarm goods and services does not vary with the price of farm products, situations in which farmers are exposed to prolonged periods of depression in farm income can be expected to continue to arise. As long as agriculture is likely to be exposed to prolonged periods of income depression, adjustment programs are likely to continue.

Even in the absence of prolonged income problems, specialization is likely to have structural implications. The increased specialization in production and the increase in specification buying has been associated with a tendency toward integration in the production and marketing of some of our farm products. Although vertical integration may continue to grow, it is hardly likely to encompass the major part of agricultural production.

To date, contract farming has been most important in sugar beets, broilers, turkeys, vegetables, and some of the fruits. More recently and in a limited number of areas, it has made some headway in cattle and sheep feeding, and in production of eggs and hogs. Few have suggested the desirability of vertical integration in production of such major farm products as wheat, cotton, and corn. The fact that reasonably satisfactory grades have been developed for these products and that they can be stored to meet seasonal requirements minimizes the need for close interrelation of production and processing plans. At least to date, vertical integration is of little importance on crop-livestock farms in the Corn Belt. In contrast to the broiler industry, these farmers furnish a major share of their feed inputs and are in better position to finance improvements in production.

In these commodities for which vertical integration is increasing, several problems deserve consideration. One aspect that deserves greater attention in both research and extension is that contract arrangements often appear to increase the use of production inputs of nonfarm origin and to increase production. In broiler production, for example, output was increased rapidly with resulting pressures on prices and incomes (fig. 9). As contract arrangements are introduced in the production of an enterprise, volume per farm usually expands rapidly. Unless other farmers go out of production, output is likely to increase, and prices may be affected substantially and farm incomes lowered. Will these results in turn lead to efforts to control production? Will farmers form bargaining associations

to attempt to improve their economic position? Will vertical integration lead to horizontal integration in some products? These problems will require close attention and study.

Some people have concluded that all farming which involves the use of contracts implies inevitably a highly integrated unit, with the farm operator relegated to a worker status. This is not necessarily true. The type of contract used varies now significantly among products and areas. For example, in many western areas, contracts in fruit and vegetable farming do not appear to have reduced radically the operator's role in decision making. Also, the larger volume of business associated with contract farming frequently tends to enlarge the responsibilities of the farm operator. A broiler producer who handles 40,000 birds under contract, for example, may make more significant decisions and perform more valuable managerial functions than would a small cotton producer who produces, say, 5 bales of cotton.

An important associated question centers around the appropriate integrating unit. These integrating functions may be performed by private firms, cooperatives, or perhaps by public institutions and regulations. In some cases, the economic and managerial position of the farmer may vary substantially under these alternative forms of integration.

The Mixed-Income Community

The growth of our industrial economy has had far-reaching effects on the rural community. Rural people who do not live on farms outnumber those who do by a 5 to 3 ratio. An increasing number of these people live in the open country. In addition, more than a third of the farm operators work off their farms 100 days or more (fig. 10). In 1957, about 40 percent of the net income of farm families was from nonfarm sources.

Looking forward to a national population of perhaps 230 million in 1975, the trend toward more nonfarm people living in rural areas appears to be inevitable. Apparently, a further increase in the number of people residing in farm areas who are not engaged primarily in farming is highly probable. Trends toward combining substantial amounts of farm and nonfarm work in a part-time farming unit are perhaps less certain.

Some persons believe that in the future commercial farming must tend toward a full-time business because of the increased scale necessary for efficient operations. But off-farm work on commercial farms has increased during the last 15 years, despite the rapid increases in scale. Frequently, modern machinery frees labor that would be needed in farming, and off-farm work is more attractive than further increases in farm size and production efficiency. Moreover, off-farm work may be a means of diversifying and stabilizing the family income. When all the labor is employed in farming, substantial variations in income may occur because of changes in the price of farm products. In other instances, it is attractive as a means of capital accumulation preparatory to full-time commercial farming. A significant part of the future job of the Extension Service will be counseling on how to maximize the total family income, including both farm production and nonfarm employment opportunities.

In both its public and its private aspects, use of land for recreational purposes deserves increasing attention. A number of farmers in the Southeast, for example, are finding fishing privileges on the farm fishing pond a valuable source

of revenue. This applies also to a growing number of hunting preserves near urban centers and the operation of "dude ranches" and other types of summer vacation facilities as a part of the farm business.

The old distinctions between farm and city are disappearing rapidly. Many a farm community is now a veritable melting pot of people of diverse occupations. These developments carry with them important community problems in rural areas. A rise in farm property tax is almost axiomatic in suburban development. School, water, and sewage problems frequently become complex. Local ordinances and regulations appear to be lacking until serious community problems have risen. Part of the difficulty stems from a lack of organization and planning that is almost inherent in rural communities. Is there a public responsibility toward rural areas that needs to be discharged more adequately?

Perhaps more pertinent, what is the function of the Extension Service in the mixed-income communities that are found in many parts of the country and that seem likely to develop in many others? Home economists can be of help to all residents of rural areas. Should the county agent attempt to function in a similar way on problems relating to such things as community development services or zoning?

A related problem is that of vocational guidance. The Agricultural Marketing Service has estimated the replacement needs for farm operators, because of death and retirement, on classes I, II, and III farms for the 1955-64 period as approximately 227,000. In 1954, there were 2,200,000 farm boys who were from 10 to 19 years of age. It is apparent from these data that only a small proportion of the farm boys now growing up on farms will have opportunity to become farm operators of medium to large commercial farms. People in farm areas have certain geographic disadvantages in choosing occupations and receiving vocational training.

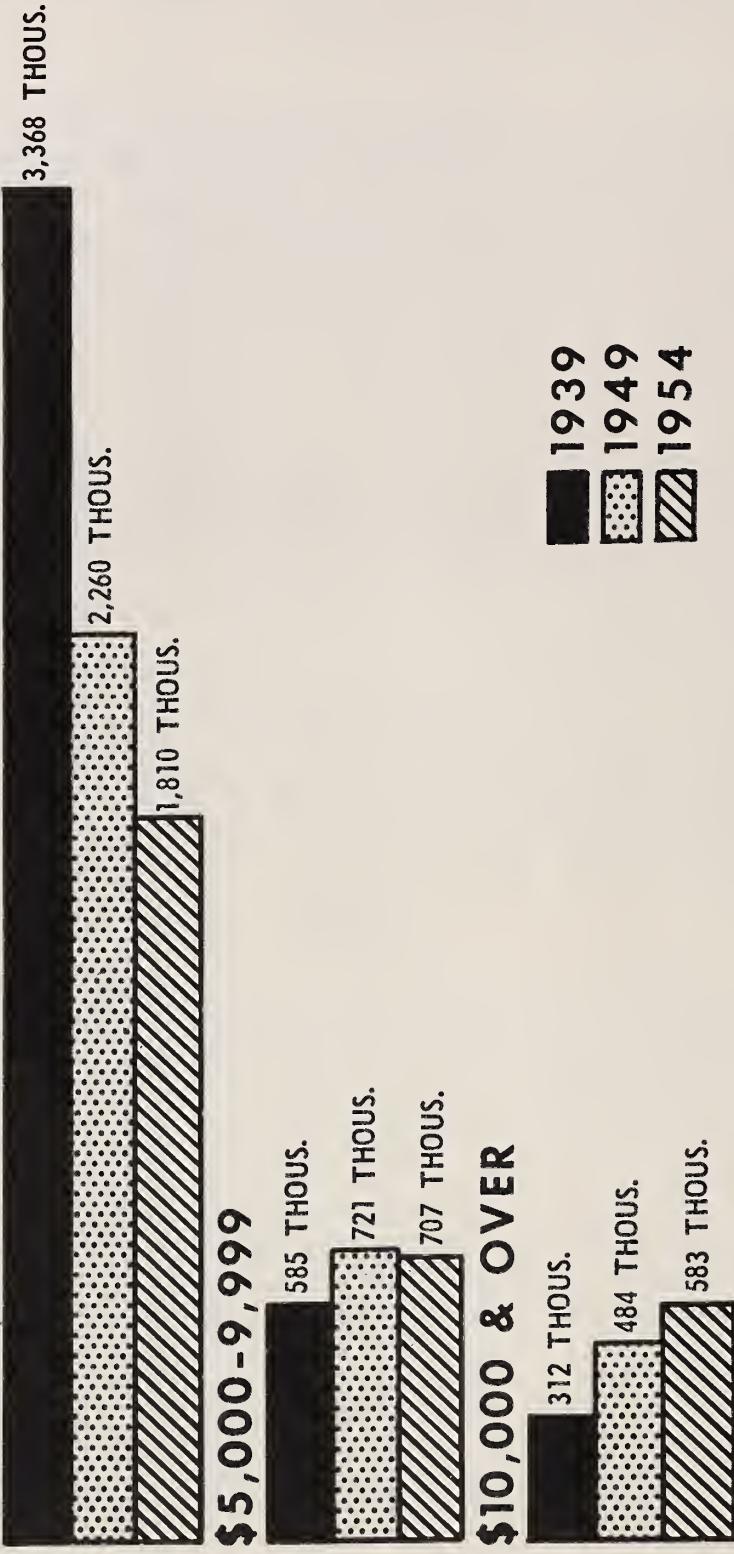
Concluding Comments

The trends toward high-capital farming, specialization, vertical integration, expanded production, and toward a mixed farm-urban orientation in rural areas will be with us in the years to come. These structural changes will be important in shaping the rural community of the future. What impacts will these trends have on our farm educational and extension services? Will increased research and educational programs be needed to develop more effective ways in which farmers can gain control over needed resources? Will services be needed to improve and develop approaches in the integration of production and marketing? Will counseling services for younger farm people faced with difficult occupational decisions be justified? I believe that such questions, which are arising because of important structural changes in agriculture, deserve serious consideration by all concerned.

LARGER COMMERCIAL FARMS INCREASE IN NUMBER

VALUE OF SALES*

\$250-5,000



* 1954 PRICES

U. S. DEPARTMENT OF AGRICULTURE

NEG. 58 (10) - 2553

AGRICULTURAL RESEARCH SERVICE

Figure 1

FARM SALES

For Budgeted \$3,500 Operator Income

TYPE OF FARM

WHEAT-BEEF

CENTRAL PLAINS, KANS.

\$15,400

WHEAT
JUDITH BASIN, MONT.

\$14,800

DAIRY
EASTERN WIS.

\$13,300

COTTON
EASTERN OKLA.

\$12,100

COTTON-BEEF
PIEDMONT, S.C.

\$12,000

DAIRY-COTTON
WESTERN TENN.

\$11,700

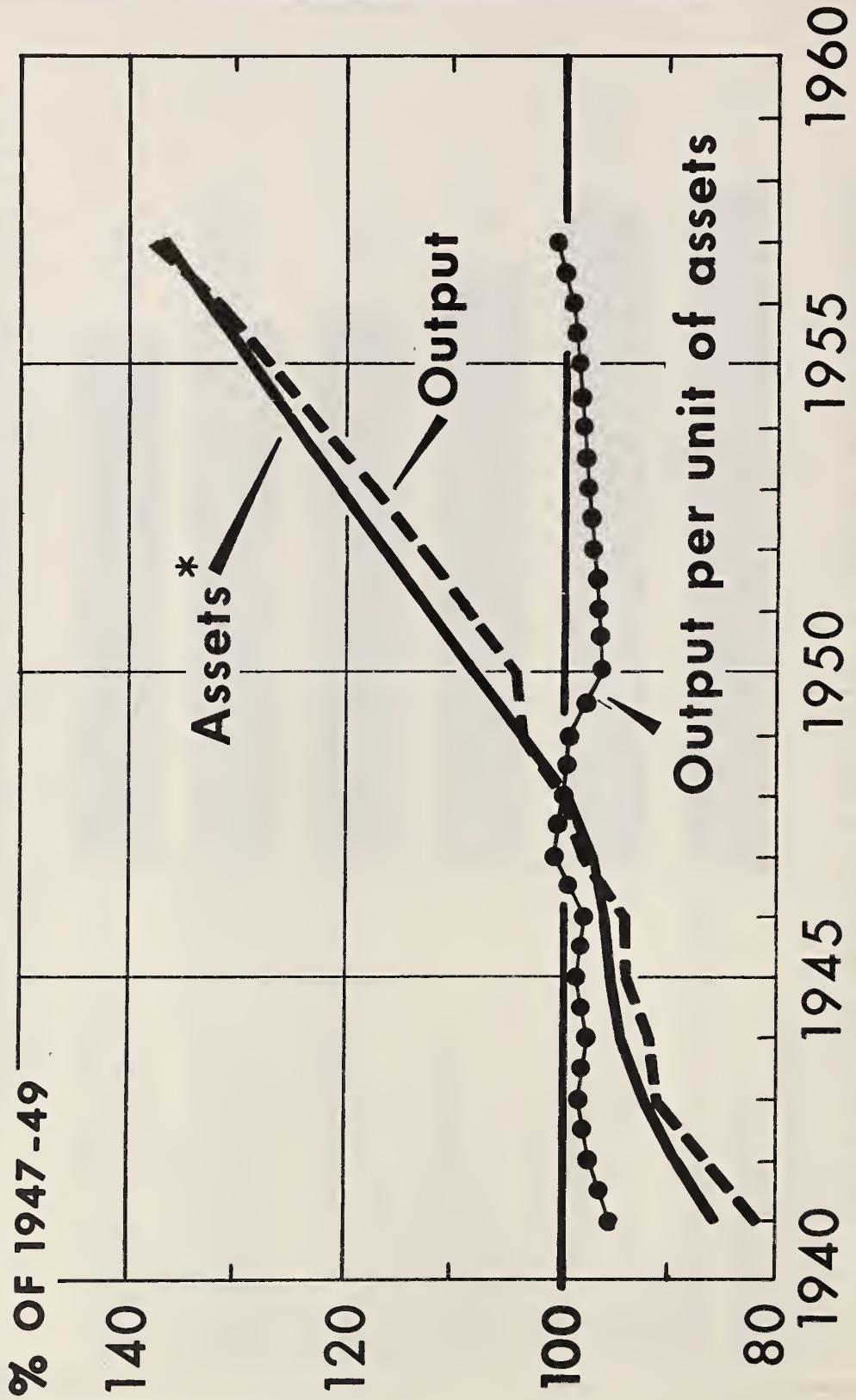
PROJECTED LONG-TERM NORMAL PRICES AND COST RATES; CURRENT LAND VALUE

U. S. DEPARTMENT OF AGRICULTURE

NEG. 58 (9) - 2537 AGRICULTURAL RESEARCH SERVICE

Figure 2

OUTPUT AND VOLUME OF ASSETS PER FARM



3-YEAR MOVING AVERAGE, 1947-49 DOLLARS

* VOLUME USED IN FARM PRODUCTION

U. S. DEPARTMENT OF AGRICULTURE

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Figure 3

PROJECTED SALES AND INVESTMENT

Per Commercial Farm

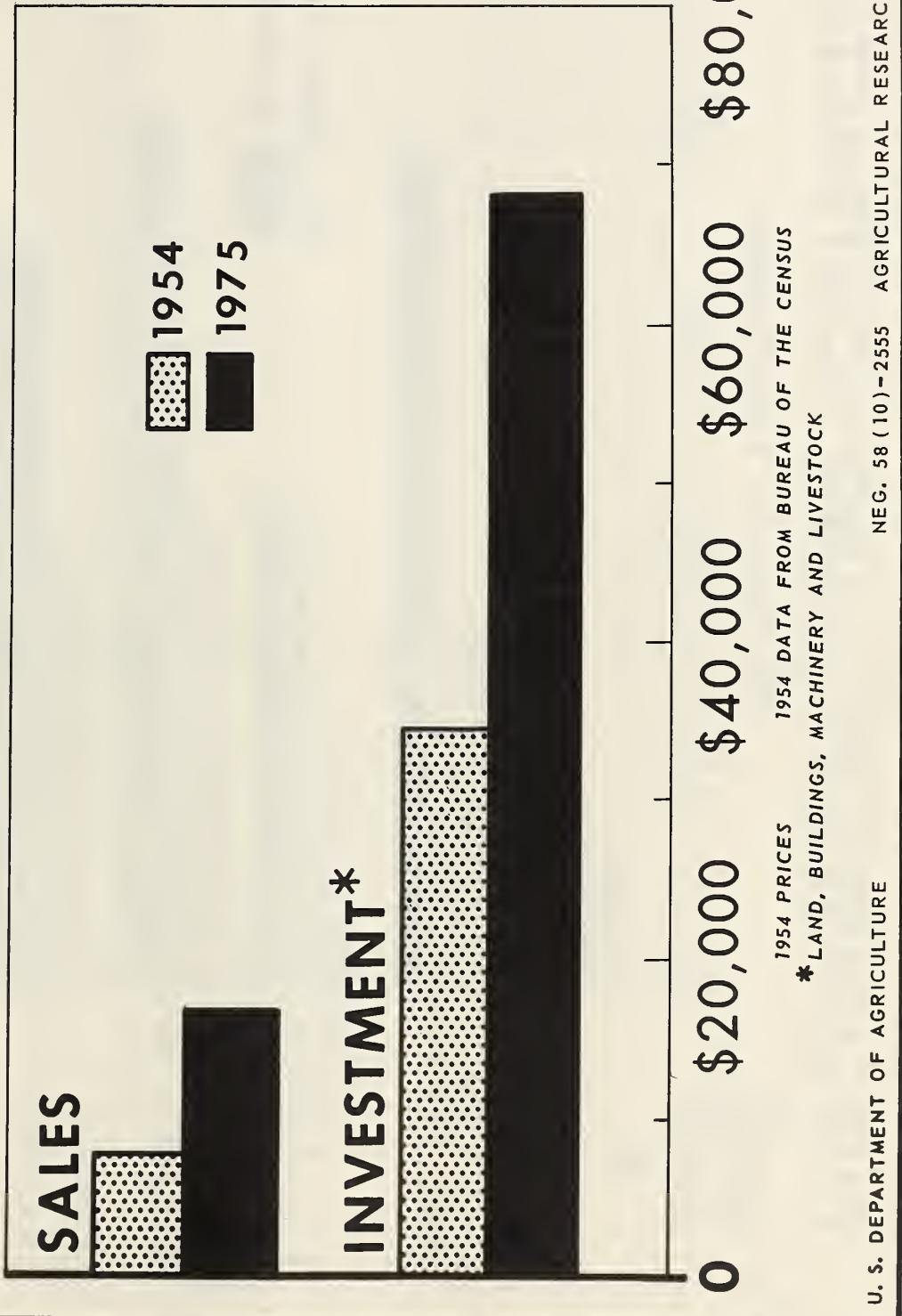
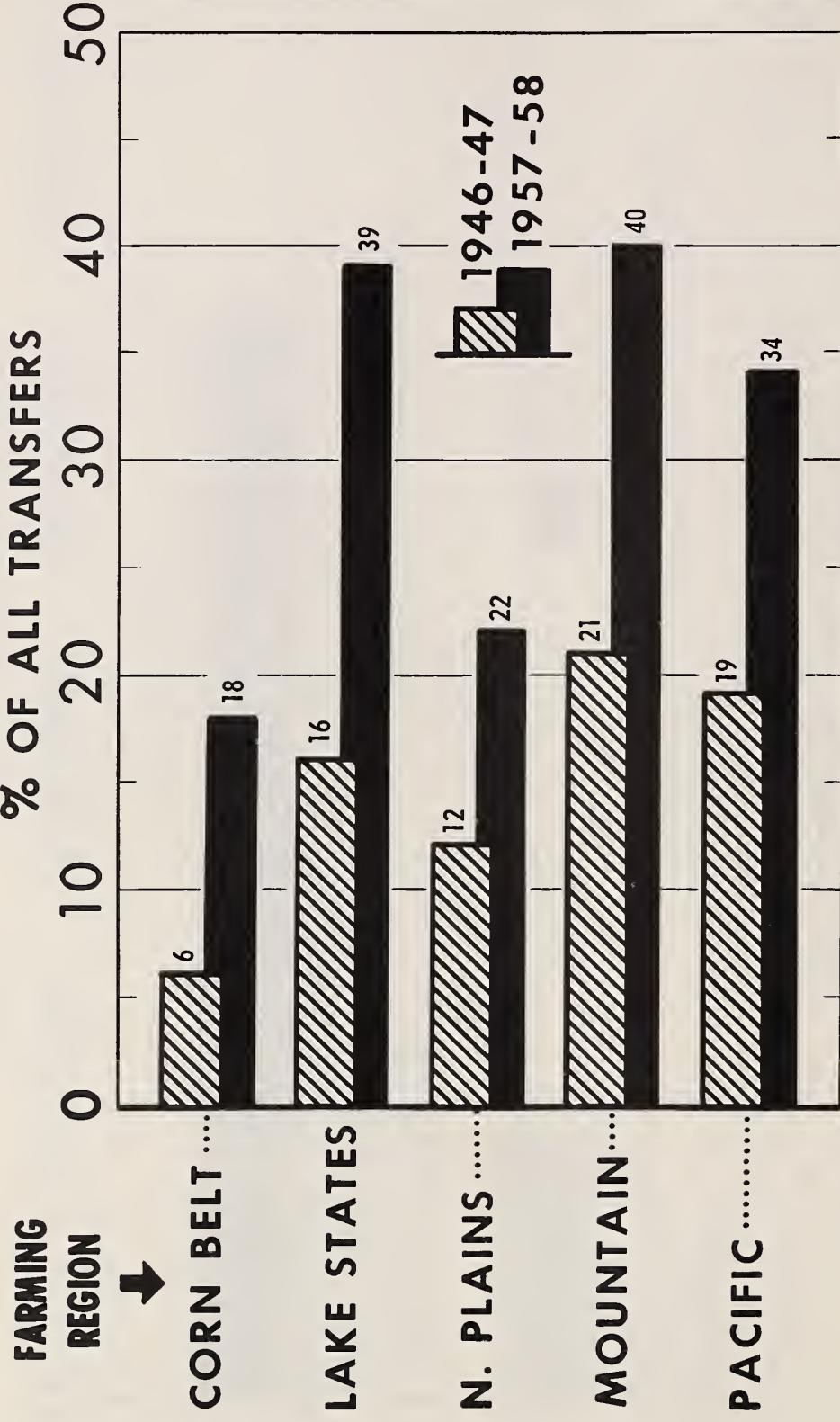


Figure 4

PURCHASES BY LAND CONTRACTS





* HIRED 150 DAYS OR MORE DURING YEAR

SOURCE: BUREAU OF THE CENSUS

U. S. DEPARTMENT OF AGRICULTURE

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Figure 6

ENTERPRISES PER FARM

1940



1954



AVERAGE NUMBER OF 20 MAJOR FARM ENTERPRISES

U. S. DEPARTMENT OF AGRICULTURE

NEG. 58 (9)-2536

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Figure 7

NONFARM INPUTS*

As a Percentage of Total Inputs, 1940 and 1957



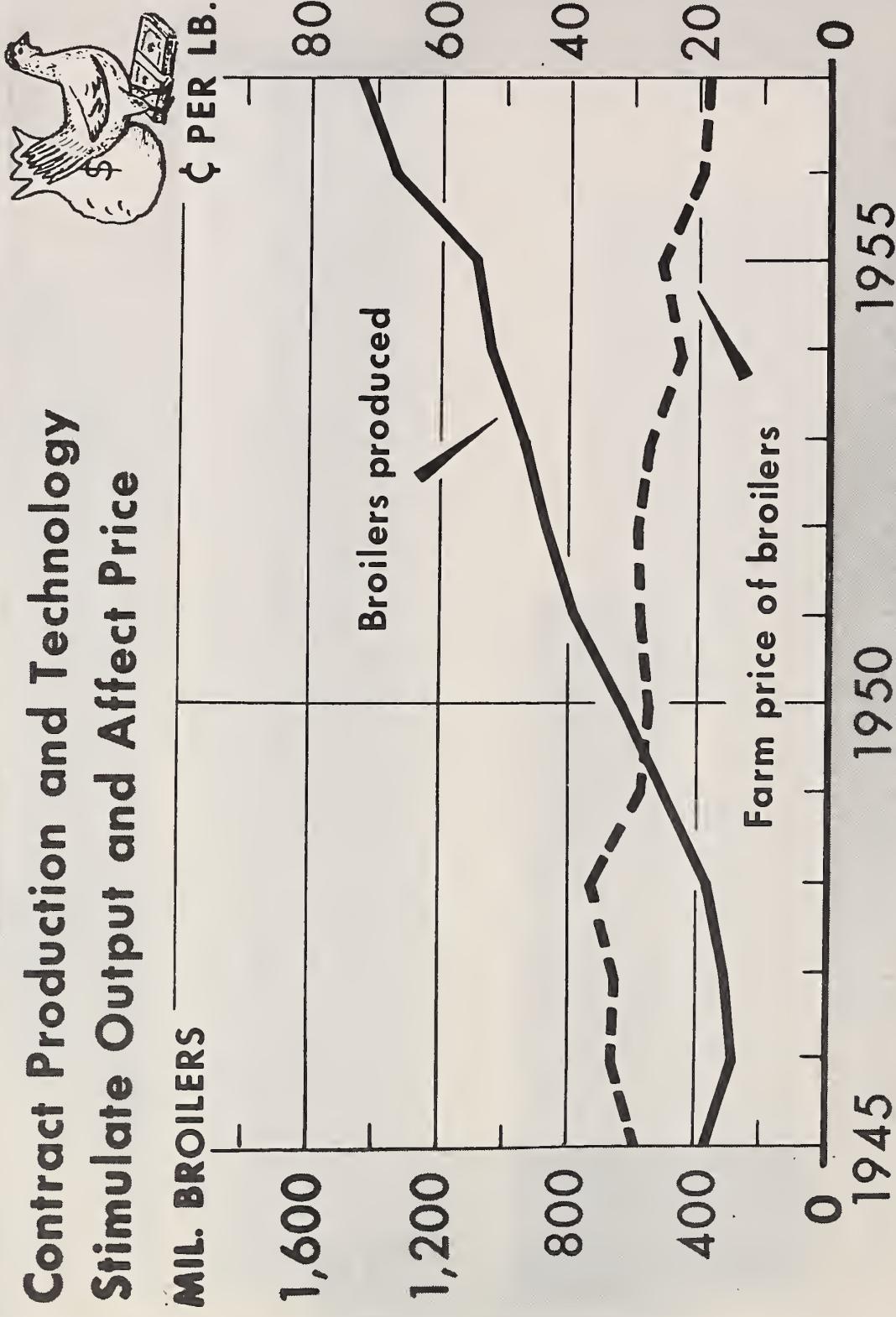
* ALL INPUTS EXCEPT LABOR, LAND AND BUILDINGS

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Figure 8

Contract Production and Technology Stimulate Output and Affect Price



CALENDAR YEAR

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Figure 9

RURAL COMMUNITIES

Becoming Increasingly Nonfarm

RURAL POPULATION



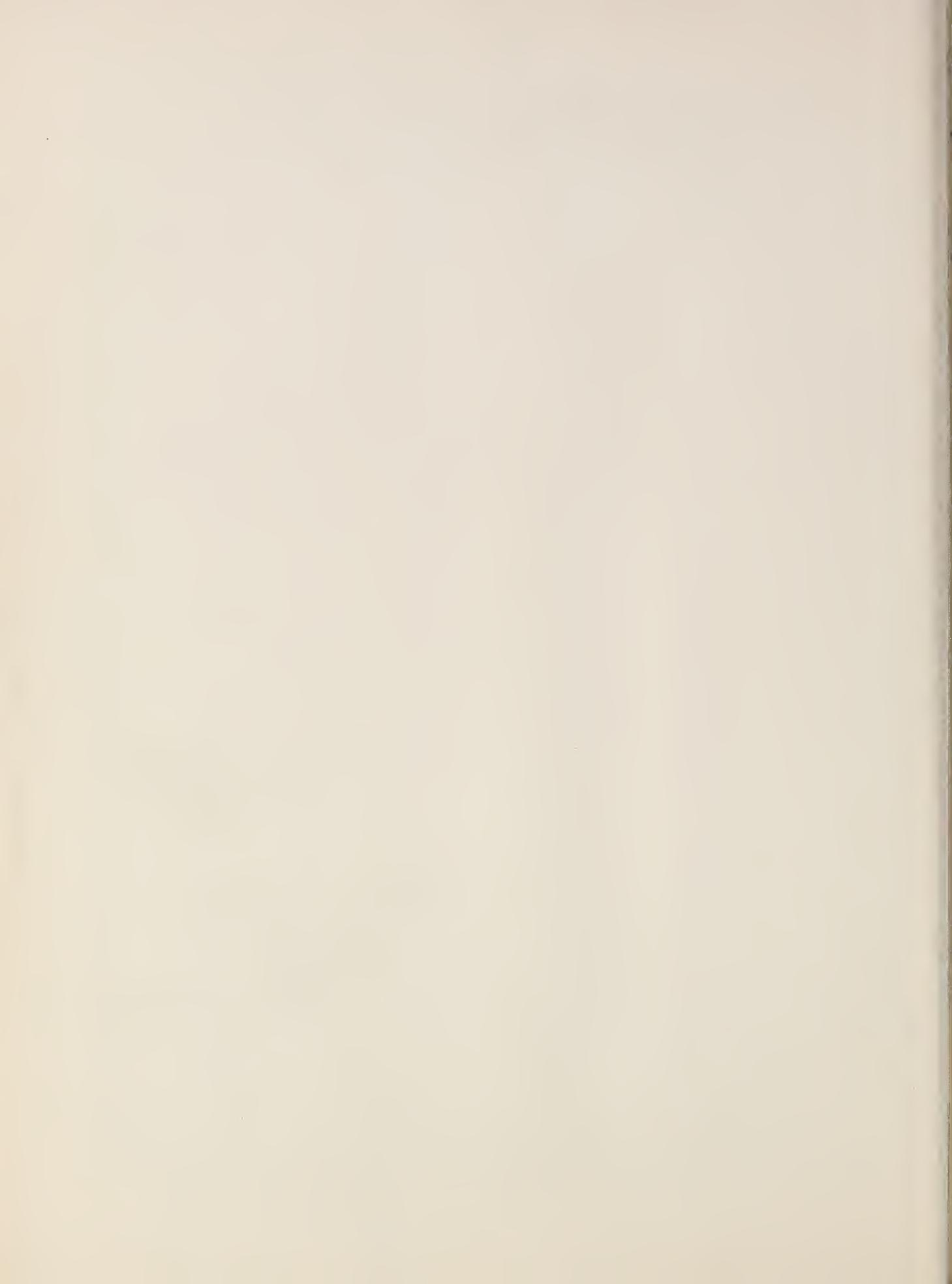
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Figure 10







Reserve

1.90

C 20 u 8

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Agricultural Research Service
Farm Economics Research Division

102

PROSPECTS FOR ADJUSTMENTS IN PRODUCTION AND RESOURCE USE 1/

By

H. L. Stewart, Chief, Agricultural Adjustments Research Branch

Address, 36th Annual Agricultural Outlook Conference
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The adjustment problems that confront American agriculture have been discussed widely. The man in the street as well as most of our farmers talk about them. Many have panaceas for them. All too often, however, our adjustment problems are construed to be merely a matter of reducing wheat, feed grain, and other commodity surpluses, without recognizing these surpluses as symbols of our basic problem.

Problems of adjustment in production and resource use in American agriculture encompass the many stresses and strains caused by economic growth within our society. They emanate from our failure to reallocate resources rapidly enough in response to change to permit farm earnings to keep pace with those in other sectors of the economy. As they stem from economic growth and as economic growth is not new, the problems of agricultural adjustment are not new. Actually, agriculture has made tremendous adjustments over the years, adjustments that have contributed greatly to the general welfare. Many of these changes are familiar to us, but frequently we fail to associate them with our problems of agricultural adjustment. When the costs and benefits of farm programs are weighed, all too often those of us who are in position to speak up for agriculture fail to set forth the advantages that accrue to the nonfarm sectors of the economy from the adjustments that agriculture has made and is continuing to make. As a background for our appraisal of prospects for adjustments, let us examine briefly some of the more pertinent changes already made.

Significant Adjustments Already Made

During the last 20 years, farm output has been increased to record levels in response to the rapid growth in demand and the adoption by farmers of a great array of technological and management improvements. We failed to anticipate the 37-percent increase in population that materialized since the mid-thirties, and few of us anticipated the record exports of the war and postwar years. Yet agriculture met these demands with such vigor that continued pressure of supplies against demand has been a source of embarrassment to our legislators and administrators alike.

1/ The analysis presented herein is based primarily on data from studies of Rex F. Daly of the Agricultural Marketing Service and Glen T. Barton, Donald D. Durost, Peter L. Hansen, Ralph A. Loomis and Robert O. Rogers of the Farm Economics Research Division, Agricultural Research Service. Their contributions are gratefully acknowledged. Conclusions and views expressed are the author's.

The composition of our farm output has been modified significantly in response to demand. Production of livestock and livestock products has been increased by more than a fifth since World War II, while up until the record yields of 1958, the increase in crop production amounted only to 5 or 6 percent.

We've been substituting nonfarm inputs for land and labor. As a result of this and of a moderate increase in total inputs, we are meeting these increased demands for farm products with one-fourth, or 2.7 million, fewer workers in agriculture than we had following World War II (1947-49 average). At that time, each worker in agriculture was supporting himself and 13 other persons. Today each farmworker is supporting himself and 23 other persons.

Although these adjustments have not achieved as close a balance between production and demand as we would have liked, they represent real accomplishments. Also, they have enhanced considerably the contribution of agriculture to other sectors of the economy. Without these and closely related developments, it would not have been possible for the nonfarm sector of the economy to have benefited as it did by:

(1) Access to an abundance of high-quality and nutritious foods.

(2) Low and decreasing prices of agricultural products relative to earnings in industry. Between 1939 and 1956, the quantity of food that one hour of factory labor would buy increased by a fifth for steak, more than a third for bread, more than a half for oranges and milk, and two-thirds to three-fourths for eggs and bacon. No doubt, a part of these decreasing relative costs were due to higher wages and increased efficiency of factory labor, but a substantial part resulted from increased efficiency in agricultural production.

(3) Both the brains and the brawn supplied by nearly 3 million workers and entrepreneurs "released" from agriculture since World War II.

(4) An increasing market for nonfarm products. Total inputs in agriculture have increased only 4 or 5 percent since World War II but nonfarm inputs 2/ have increased by a third.

(5) Ample supplies of food and fiber for winning both the war and the peace.

(6) An abundance of technical know-how for increasing agricultural production and ability to adapt it to conditions in underdeveloped countries to permit them to increase productivity and thus to strengthen the position of the free world.

2/ Nonfarm inputs as used here include all inputs other than real estate and labor.

Progress Has Been Insufficient

Despite unprecedented increases in demand and in the level of expenditures for programs designed to encourage adjustments and maintain incomes in agriculture, and despite the tremendous adjustments made by agriculture in response to changes in demand, the adjustments achieved have not been large enough to assure comparable rates of return in agriculture and the nonfarm sector of the economy for similar services. Progress has been made in some sectors. Through increased marketings and production restrictions, production of some commodities has been brought sufficiently in balance with demand that their stocks have been in the process of being reduced. But with the record yields obtained this year, stocks of such commodities as wheat and feed grains are expected to reach new record levels. It is estimated that production from about 14 million acres of our cropland went into stocks annually during the 5 years from 1953 to 1957, and it looks as though the production from some 30 or 35 million acres will be used to increase inventories in 1958.

During the years, farmers have shared in the increasing standard of living of this country. This has been especially true of our commercial farmers. But they have not shared equitably with other sectors of the economy and herein lies our adjustment problem. This has been particularly true since production began to so greatly outpace demand following the World War II and rehabilitation periods. In 1951, average hourly earnings in agriculture were about half those of workers in industry, and the discrepancy continued to increase through 1957. The index of "real income" of farm-workers, in terms of 1947-49 dollars, declined from 96 in 1950-51 to 84 in 1957, while that of industrial workers was increasing from 110 to 129 (fig. 1). Let us look at some of the factors that have tended to retard adjustments and to counteract the effects of those we have achieved. Why has production tended to outrun demand despite the tremendous adjustments we have made?

Reasons for Insufficient Progress

One reason for our inability to make more progress in adjusting production to demand has been our tendency to keep total production pushing against total demand by substituting alternative enterprises for those whose production we have been able to reduce. We have reduced our total acreage of principle crops by about 29 million acres since 1953, but we have substituted one crop for another whenever possible. For example, a decrease since 1953 of some 7 million acres of corn and 5 million acres of oats has been more than offset by an increase of 10 million acres of grain sorghums and 7 million acres of barley. The acreage planted to feed grains other than corn has been increased by nearly 13 million acres. A decrease of 13 million acres of cotton has been offset partly at least by the increase in feed grains and by an increase of more than 8 million acres in soybeans (fig. 2). Also, we have substituted livestock enterprises for crop production. As the demand for agricultural products is relatively inelastic, and as total agricultural production is some 5 or 6 percent in excess of total demand, we stand little chance of bringing production in balance with demand merely by shifting from one enterprise to another.

REAL INCOME OF FARM AND INDUSTRIAL WORKERS

- 4 -

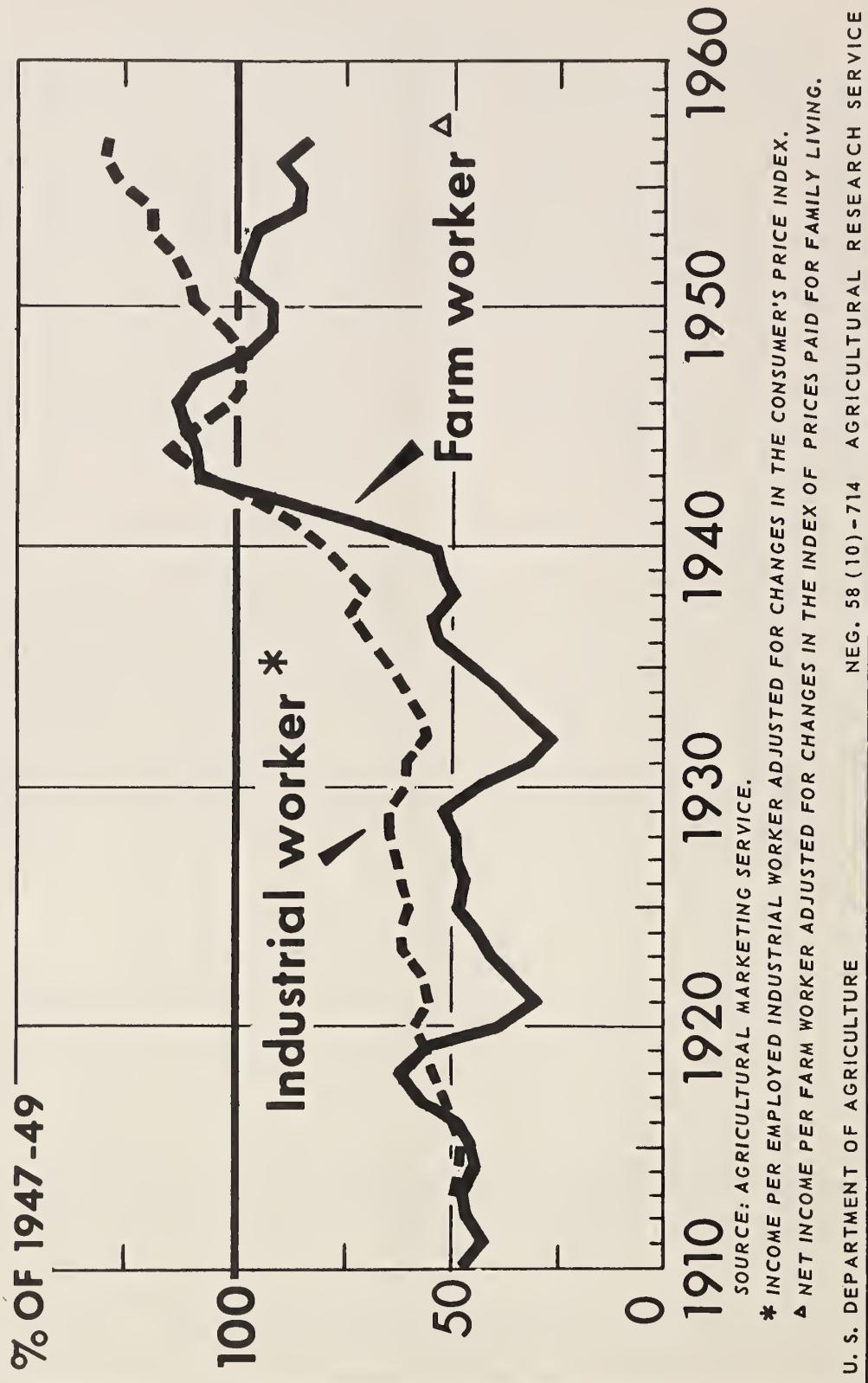
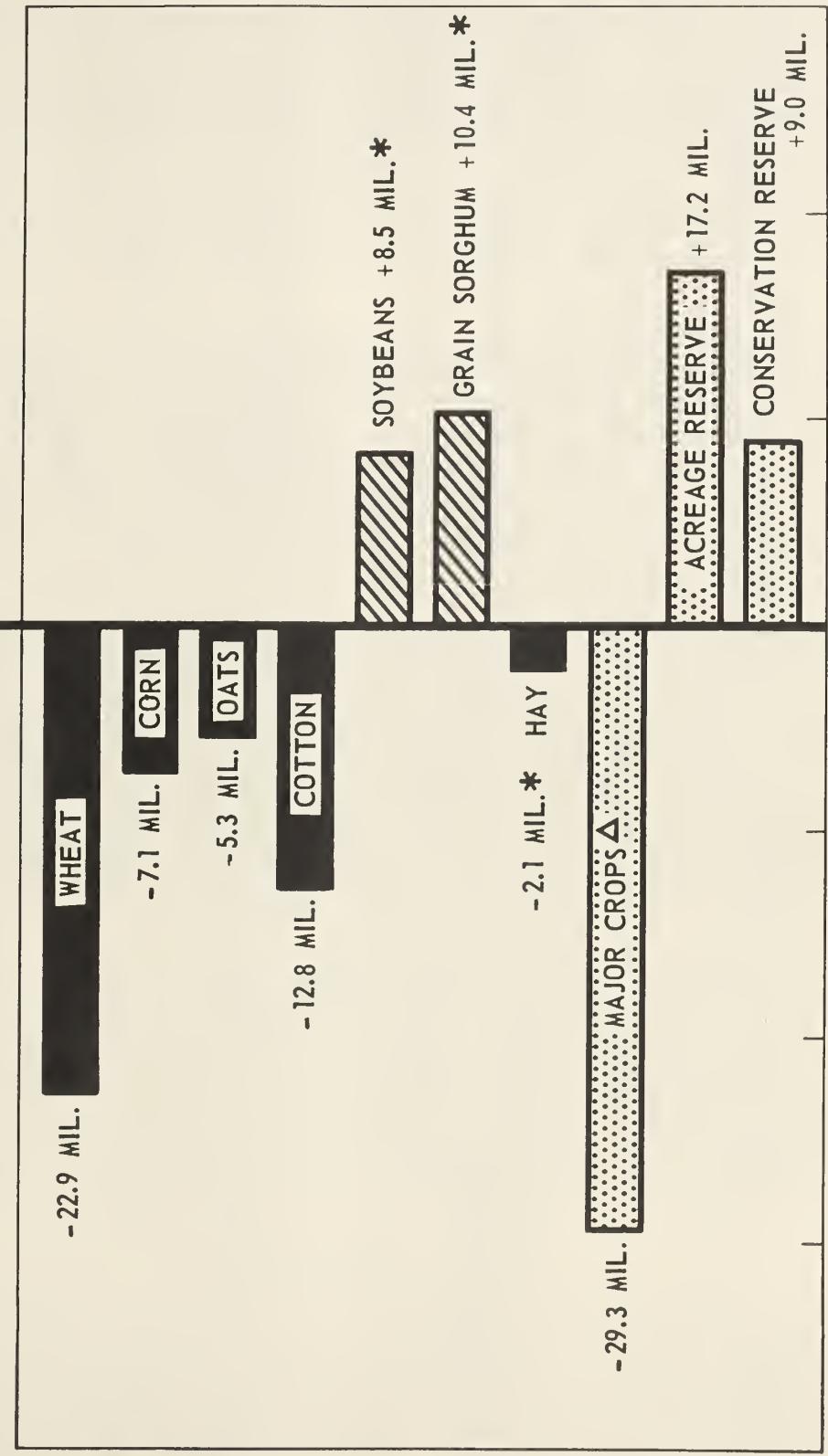


Figure 1

1958 Compared With 1953

CHANGES IN PLANTED ACREAGE



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Figure 2

More important than the substitution of one enterprise for another has been our tendency to substitute nonfarm inputs for labor and land taken out of production (fig. 3). Loomis estimates that all nonfarm inputs have increased by a third since 1947-49, and it is apparent that the increased use of such things as fertilizer, pesticides, formula feeds, improved seeds, and better strains of livestock has more than offset the reduction in acres of cropland and numbers of farmworkers. The result has been a substantial increase in crop yields per acre, an even greater increase in livestock production per breeding unit (fig. 4), and a total farm output larger by a fifth.

It isn't too difficult to understand our tendency to keep on producing in excess of demand. The individual producer is willing to spend another dollar for fertilizer, or any other input, so long as the resulting increase in output will more than pay him for the expenditure. This is what he has tended to do, but in a dynamic environment with new technology appearing almost daily, and with increasing risk and capital requirements, he hasn't yet caught up with his marginal returns limit. Thus, it still pays him as an individual to adopt yield-increasing techniques, unless prices have declined drastically.

Figures 5 and 6 show that a 20-percent decline in milk prices has little deterring effect on the adoption of yield-increasing techniques by a typical dairy farmer in northern Iowa. It will pay him as an individual to increase his milk production because he has not reached his marginal returns limit and because the additional 2,000 cwt. of milk he produces will not affect his unit price. But because of the inelastic demand for agricultural products, the dairy industry, or any other agricultural commodity group, begins to get into trouble when the efforts of individual producers to reach their marginal returns limit result in an aggregate supply in excess of demand.

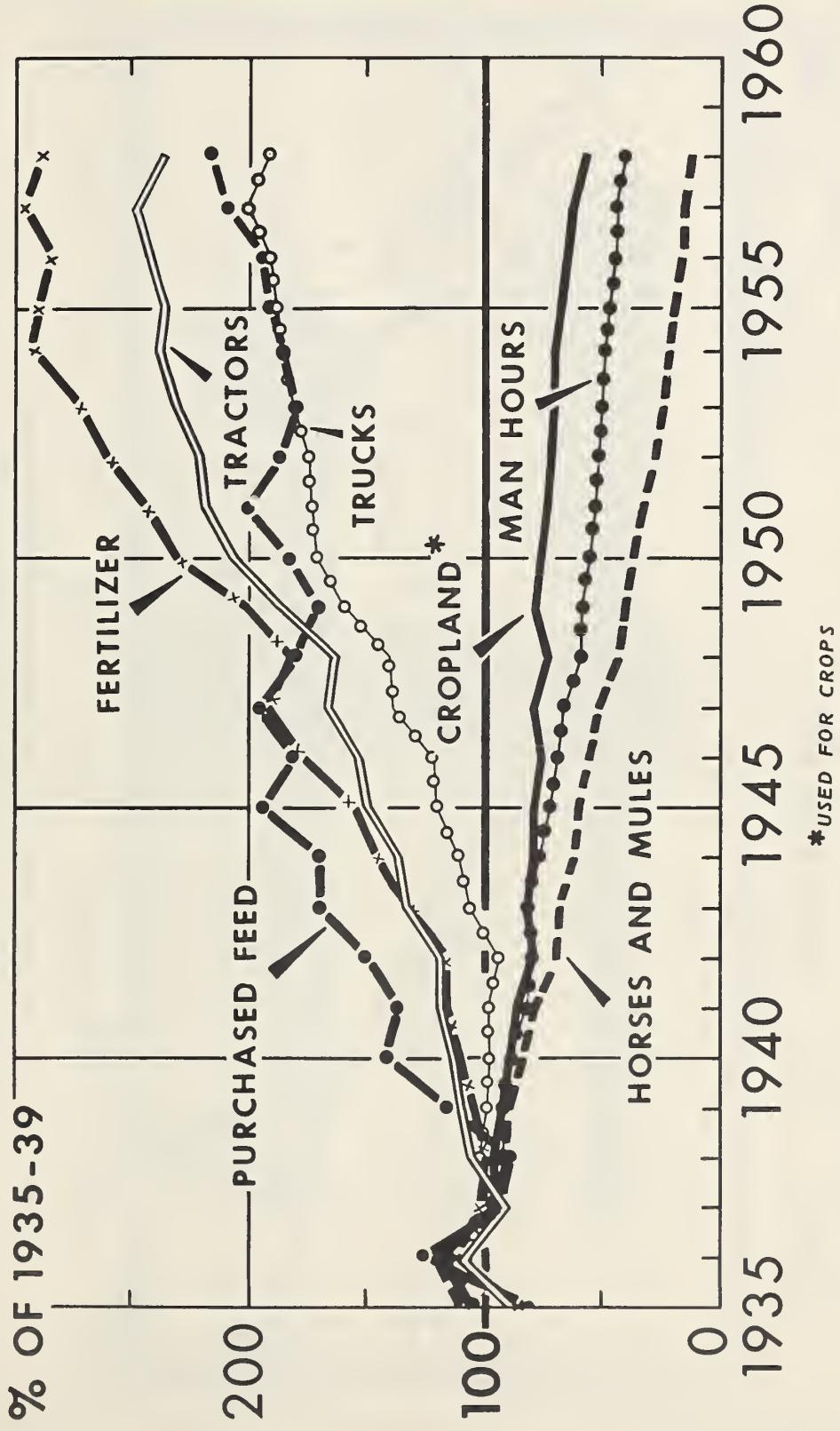
Also, once the individual producer is in business it may not be easy for him to get out, even when the industry gets into trouble. Investments in agriculture often have little value in nonfarm uses and the producer usually chooses enterprises that are his best alternatives. With our wheat surpluses has come a general condemnation of the "plow-up of the Plains," but figure 7 suggests that, with only grass as an alternative, the Plains farmer will profit by keeping his land in wheat if it produces more than 6 bushels of wheat per acre. And what farmer in these days is convinced that he can't produce more than 6 bushels of wheat to the acre?

Future Requirements

Let us turn now to an examination of the adjustments in production and resource use that will be needed in the future. In this part of the discussion, we shall appraise briefly the prospective demand for various groups of agricultural commodities in light of prospective changes in population and in per capita consumption rates. Here, we shall borrow heavily from the demand analyses of the Agricultural Marketing Service. We shall examine prospective changes in crop yields and livestock production rates in light

SELECTED RESOURCES USED

Per Unit of Farm Output

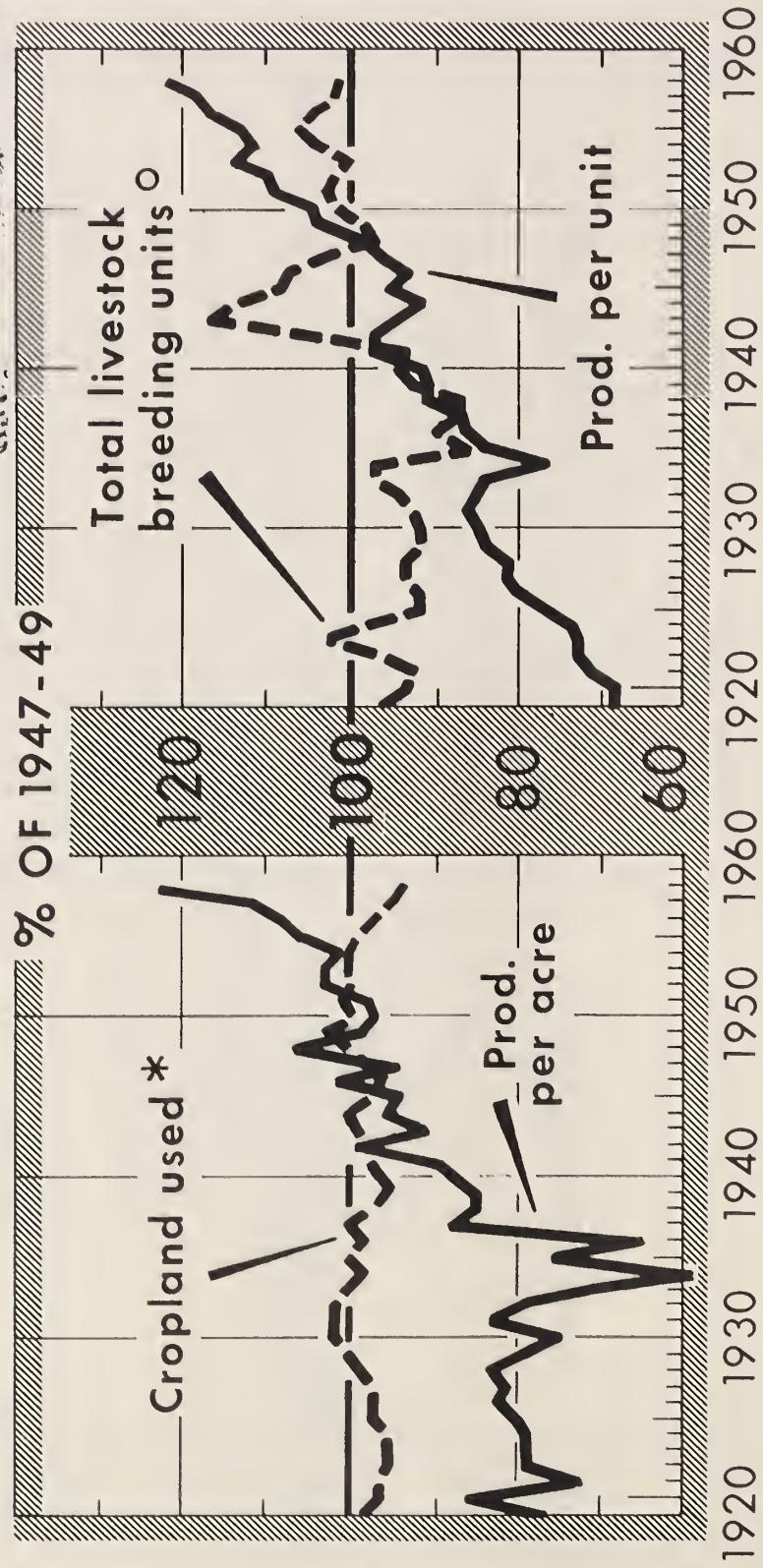


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Figure 3

FARM PRODUCTION PER ACRE AND PER ANIMAL



* ESTIMATED ACREAGE FROM WHICH ONE OR MORE CROPS WERE HARVESTED
PLUS ACREAGE OF CROP FAILURE AND SUMMER FALLOW

○ INCLUDES ALL BREEDING LIVESTOCK EXCEPT HORSES, AND ALL LIVESTOCK PRODUCTION
EXCEPT FARM-PRODUCED POWER OF HORSES AND MULES

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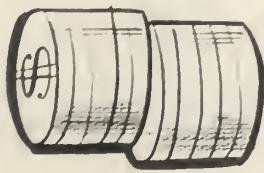
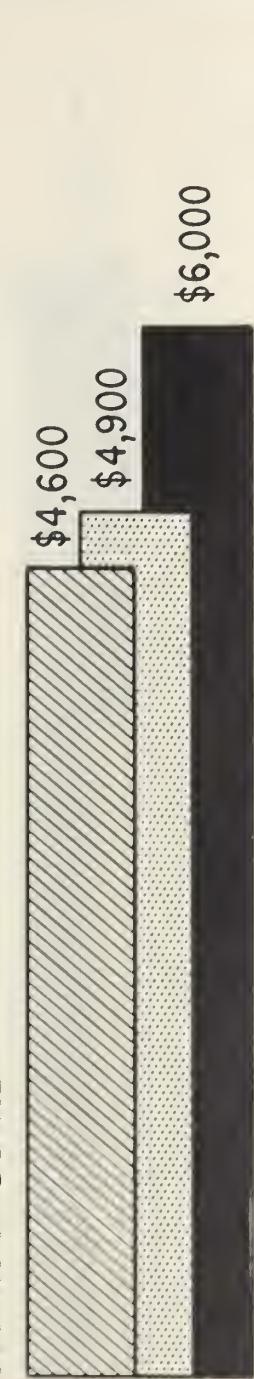
Figure 4

20% Lower Milk Prices

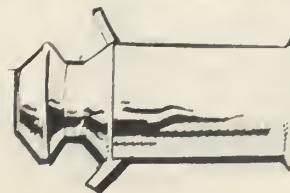
IMPROVED TECHNOLOGY

Increases Income and Production

FARM INCOME*



MILK



Practices: Usual
Improved --- dairy & crop

*NET

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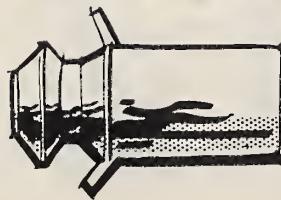
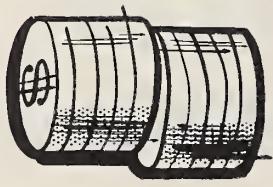
Figure 5

1955 Prices

IMPROVED TECHNOLOGY

Increases Income and Production

FARM INCOME *



Practices: Usual

Improved --

* NET

ON A 2-MAN DAIRY FARM, NORTHEASTERN IOWA
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Figure 6

LAND PRODUCTIVITY AFFECTS PROFITABLE USE

WHEAT YIELD/ACRE

4 BU.

\$0.15

\$1.50

5 BU.

\$1.00

\$1.66

6 BU.

\$1.85

\$1.81

Break even

7 BU.

\$2.70

\$1.97

8 BU.

\$2.14

\$3.55

NET INCOME
PER ACRE

■ Wheat

■ Grass

- 11 -

EASTERN COLORADO

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Figure 7

of recent trends and future possibilities. And we shall appraise both our ability to meet these prospective demands and the adjustments in land and labor resources that would be required.

The most recent projections of the Bureau of the Census indicate a population by 1975 ranging from a low of 216 million to a high of about 244 million. Assuming a midpoint projection of a 230-million population, current prices, real consumer incomes per person around 40 percent above those of 1956, moderate increases in per capita consumption rates in keeping with past trends and the assumed level of economic conditions, and agricultural exports at the average 1951-55 level, Daly projected our total crop production needs by 1975 at a level some 28 percent above that of 1956 3/ (fig. 8). Projected domestic requirements vary significantly by groups of crops. They are lowest for the food grains and potato group, and highest for the fruits and vegetables. Daly's 4/ projected requirements for livestock show total livestock production required by 1975 to be some 40 percent above the 1956 level, with increases in domestic requirements for various groups of livestock products ranging from a third to more than a half (fig. 9).

To meet needs of this magnitude by 1975 we would need an average annual increase in total farm output about as large as that recorded during World War II and the immediate postwar years, and more than double the long-term annual increase since 1910. We might conclude from this that we could "eat our way out" of this adjustment problem, but before we arrive at such a conclusion, we need to take a look at our prospective ability, or, if you please, our propensity, to increase production.

The series of studies conducted cooperatively by the natural scientists and the farm economists of Agricultural Research Service throw considerable light on this propensity. They show that, with a 1951-53 cropping pattern, "economic attainable" crop yields by 1975 would average about 40 percent above the 1951-53 base used in the study and more than a fourth above the 1957 crop yields. An increase in efficiency of feed conversion of some 10 or 12 percent is estimated to be attainable by 1975, and attainable gains in output per animal range from 7 to 27 percent (fig. 10). Considering the amount of increased yields achieved during the last 17 or 18 years, the fact that these projections are based on known technology with no allowance for new developments, and that they include an allowance for management limitations and other factors that have tended to retard adoption of improved practices in the past, these projected increases may be conservative indicators of the increases in yields that are likely to occur. This appears to be especially true of some of the crop yields when we compare them with 1958 yields, even though we recognize that growing conditions in 1958 have been exceptionally good for such crops as wheat and grain sorghums (fig. 11).

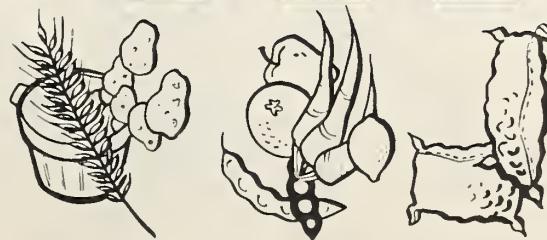
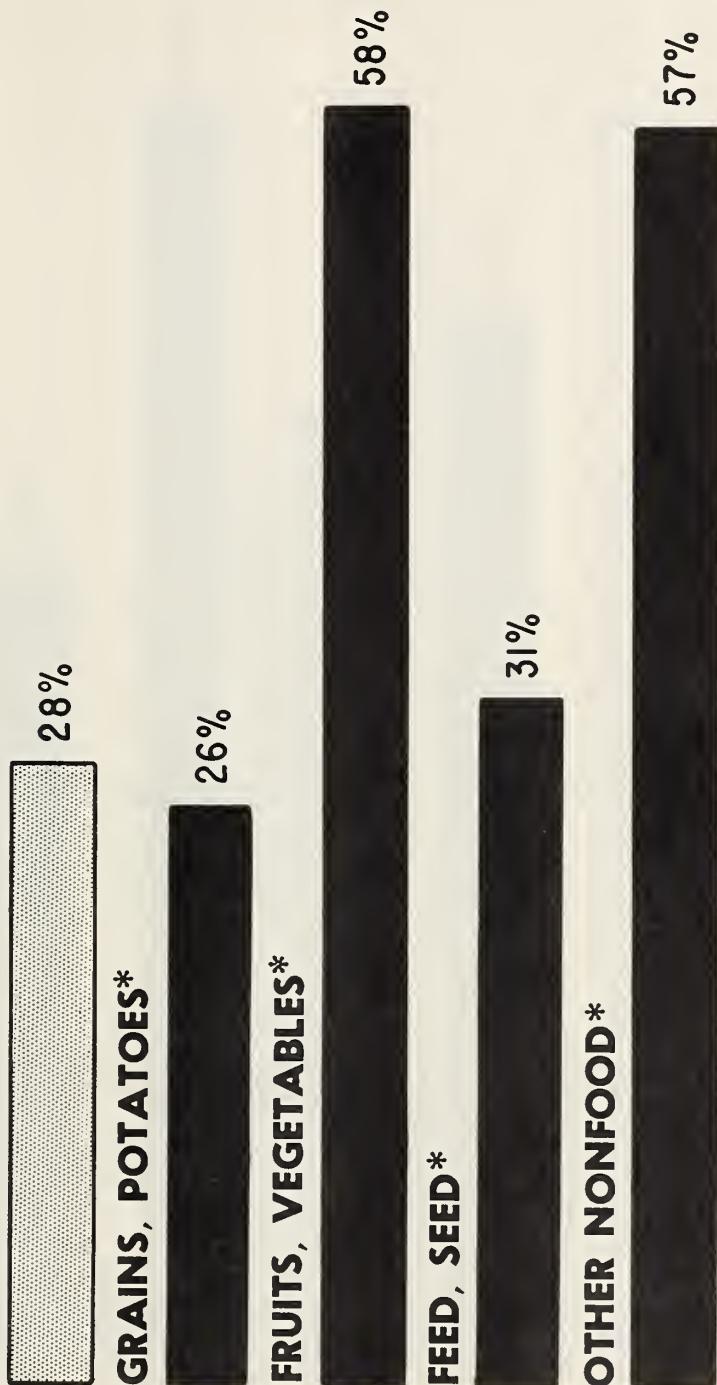
3/ Rex F. Daly, Prospective Domestic Demands for Food and Fiber - published in Policy for Commercial Agriculture--Its Relation to Economic Growth and Stability, Subcommittee on Agricultural Policy, Joint Economic Committee, 85 Congress, 1st Session.

4/ Ibid.

DEMAND FOR CROPS

Projected Change, 1956 to 1975

ALL CROPS ▲



ASSUMING CURRENT PRICES ▲ CHANGE IN PRODUCTION NEEDED *DOMESTIC UTILIZATION

SOURCE: AGRICULTURAL MARKETING SERVICE, USDA

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Figure 8

DEMAND FOR LIVESTOCK

Projected Change, 1956 to 1975

ALL LIVESTOCK Δ

MEAT ANIMALS* 40%

DAIRY PRODUCTS*

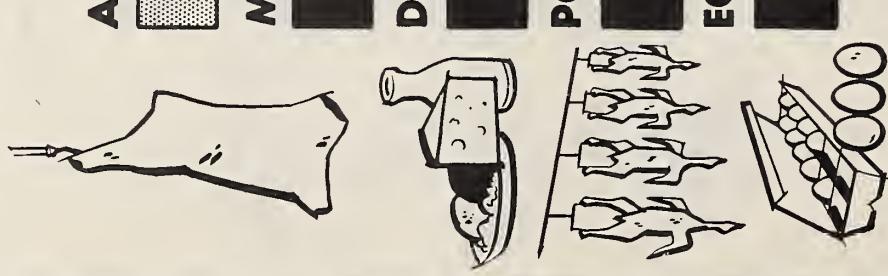
43%

POULTRY*

56%

EGGS*

36%



ASSUMING CURRENT PRICES Δ CHANGE IN PRODUCTION NEEDED *DOMESTIC UTILIZATION

SOURCE: AGRICULTURAL MARKETING SERVICE, USDA

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Figure 9

GAINS IN OUTPUT PER ANIMAL

BEEF PER COW *o



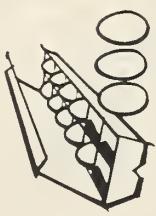
PORK PER LITTER *o



MILK PER COW ^



EGGS PER LAYER ^



% Change: 1939-41 to 1957 1957 projected to 1975

* LIVEWIGHT PRODUCED

o ON HAND JAN. 1 (EXCLUDES BEEF FROM DAIRY ANIMALS)

▲ AVERAGE NUMBER DURING YEAR

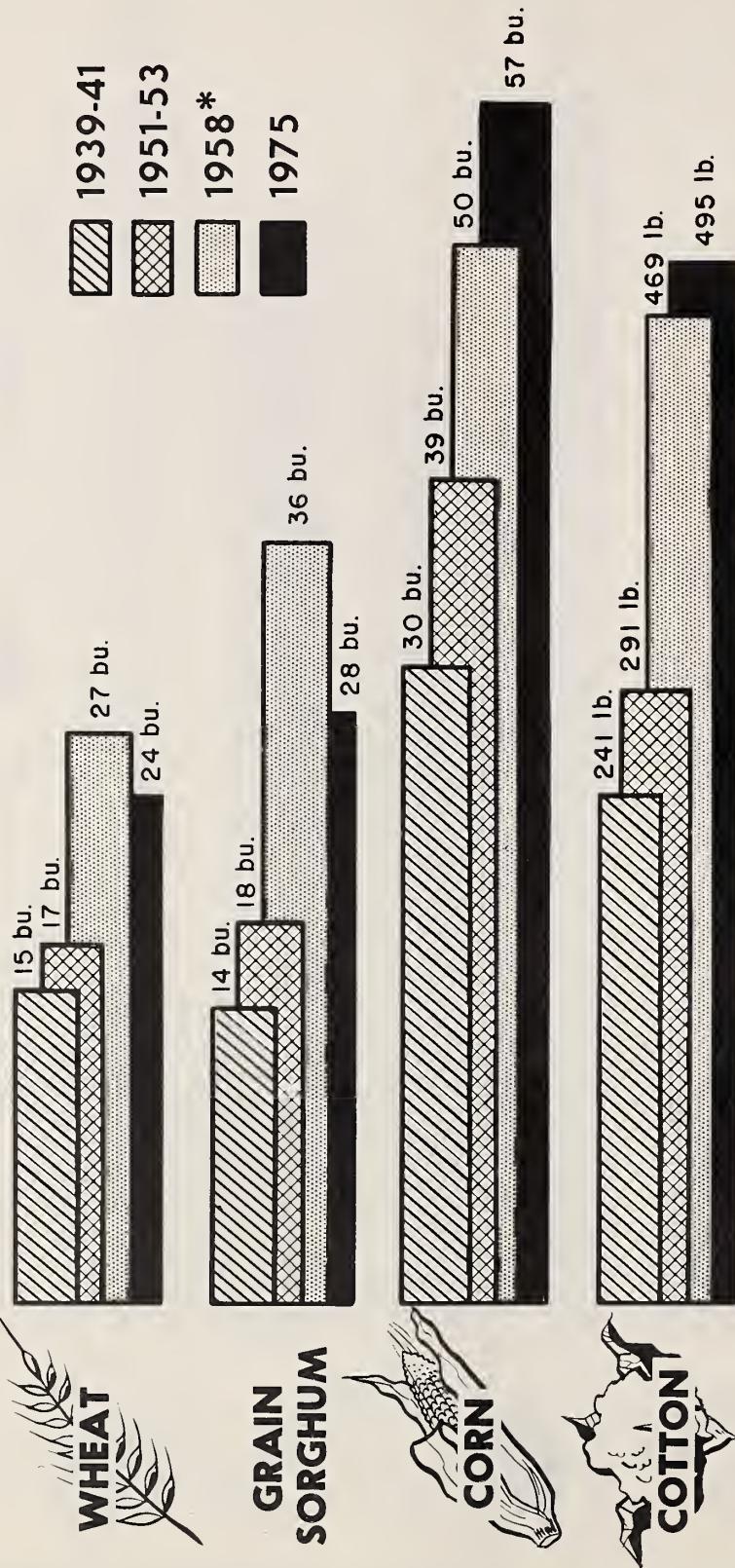
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Figure 10

CROPS YIELDS

Per Harvested Acre, Projected to 1975



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Figure 11

Projected increases in the efficiency with which the various classes of livestock convert feed appear to be substantial compared with recent accomplishments. The number of pounds of feed ^{5/} required to produce a pound of hogs is expected to decrease about 15 percent during the next 17 or 18 years compared with essentially no change during the last 17 or 18 years (fig. 12). Eight or nine percent less feed is projected per pound of beef (live weight) produced compared with a 3-percent decrease realized since 1939-41 (fig. 13). A 10 percent decrease in the amount of feed used to produce a pound of milk is projected, compared with the 3 percent decrease realized (fig. 14). Also, a 28 percent decrease is projected for broilers despite the tremendous advances (38 percent) made during the last 17 years) (fig. 15).

If these attainable crop and livestock yields and changes in feeding efficiency are achieved there will be little doubt as to our ability to meet the projected output needs for 1975. If a more effective means for achieving adjustments between enterprises could be found, our land base would be more than adequate. As it is, an additional 14 million acres of cropland and cropland pasture equivalent would be required (fig. 16). But the total needed would be essentially the same as the 526 million acres used in 1951-53. It has been estimated that some 30 million acres of new cropland will be added to our cropland base by 1975, if public programs and related farm improvements continue at about the same rate as in the last decade. ^{6/}

The labor force in agriculture also will be more than adequate to meet our production needs by 1975. If trends during the last decade in output per man-hour continue, we can meet 1975 production needs with one-third fewer man-hours of farm labor than we used last year (fig. 17).

Conclusions

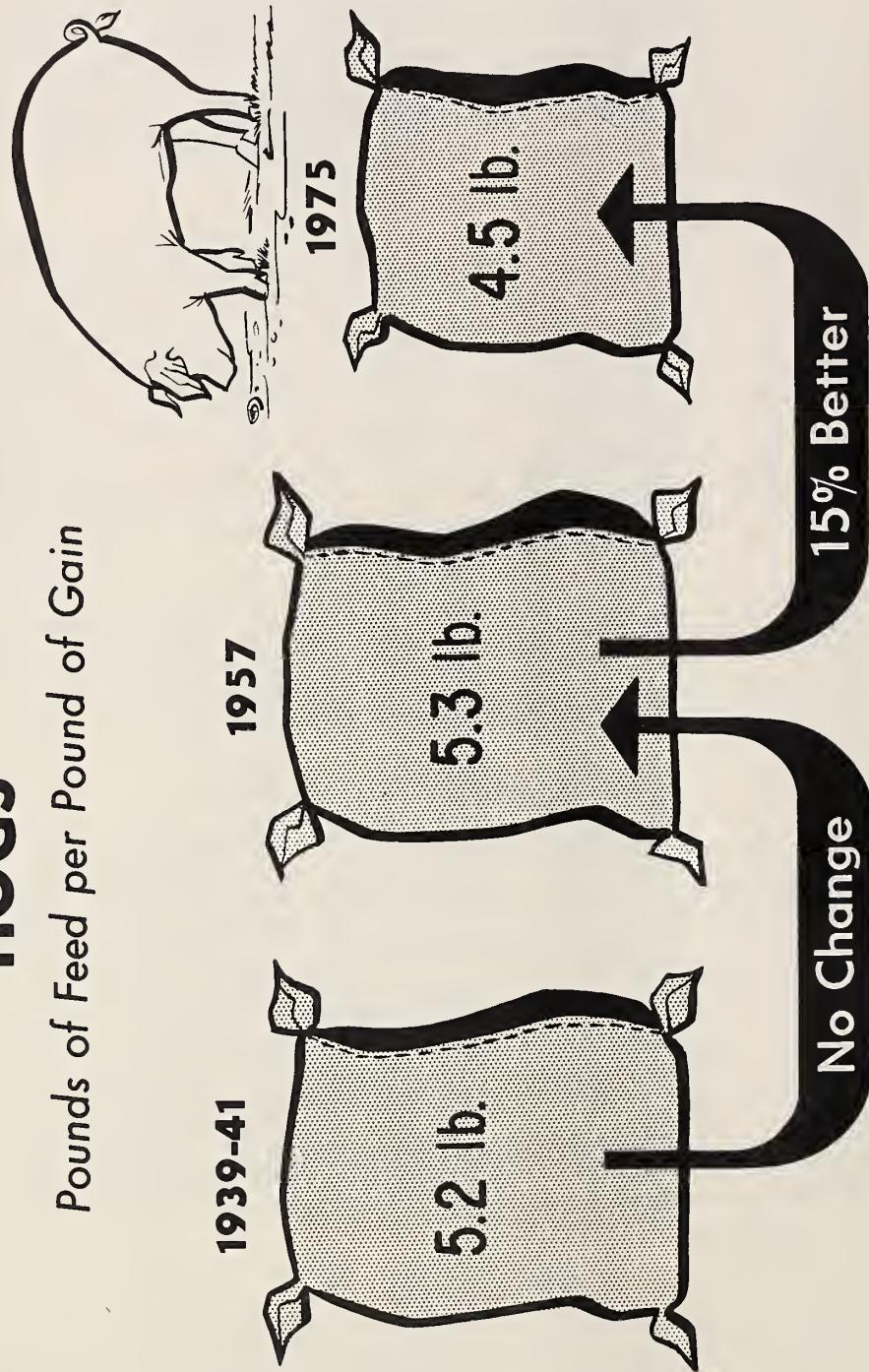
Any idea of "eating our way out" as the sole solution of adjustment problems in the next two decades must be rejected. This is obvious when one considers the apparent ease with which our projected needs for agricultural products in 1975 can be met, without any increase in technology beyond present know-how and without resorting to such devices as upgrading of pastureland, or increased reliance on direct food crops. Rather, it seems apparent that adjustment problems will remain with us for some time to come, and that we must get on with the business of achieving a better allocation of resources, both within agriculture and between agriculture and other sectors of the economy. That others are convinced of this is evidenced by the growing interest in agricultural adjustments by farm groups, editors, educators, State Experiment Stations and Extension Services, credit institutions, and others throughout the country.

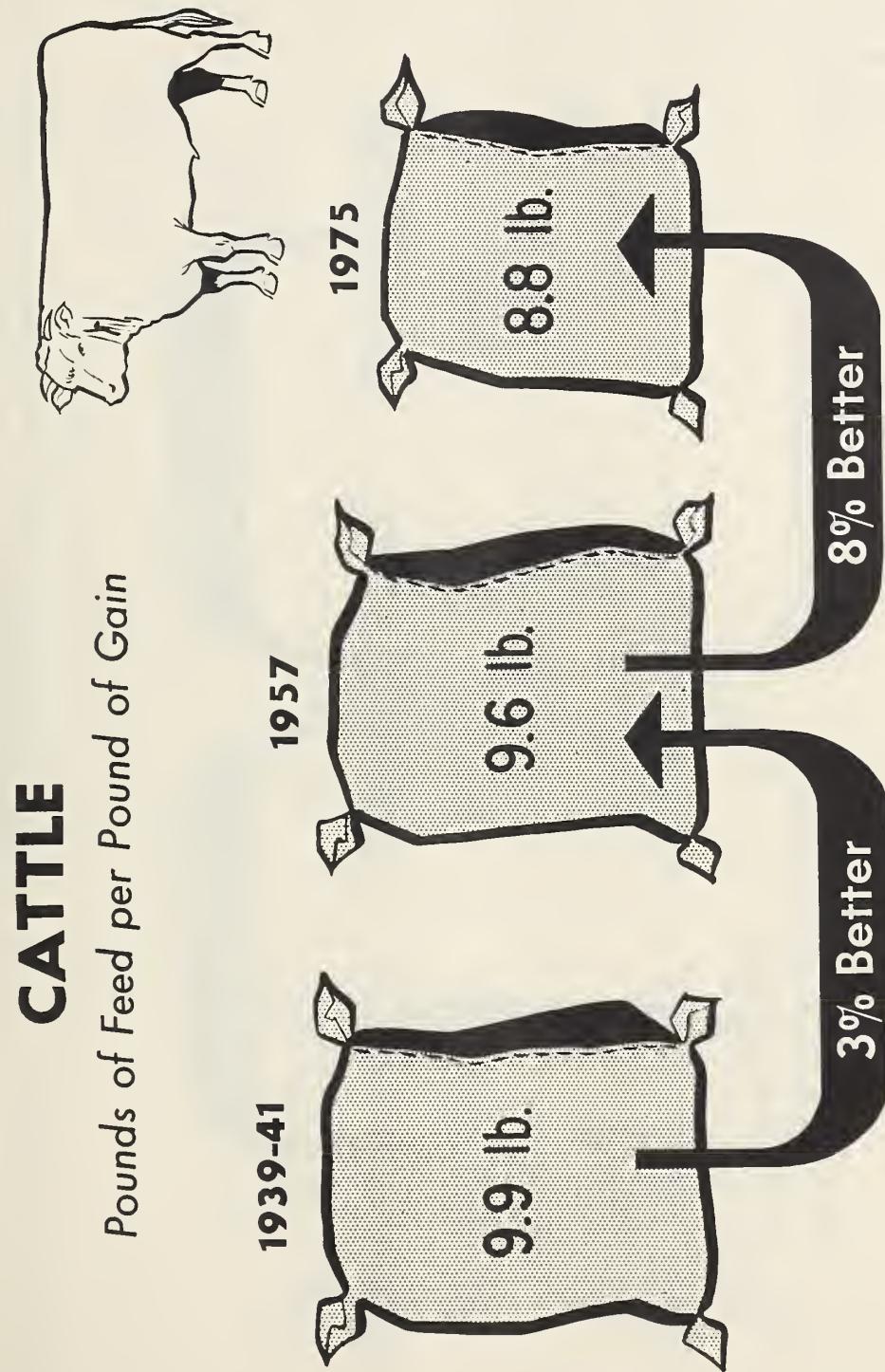
^{5/} As used here for all classes of livestock, feed refers to "feed units"--a feed unit is the equivalent of one pound of corn. Feed used per unit of production varies from year to year. Hence, use of a single year (1957) as a base for comparison, suggests an unwarranted degree of precision in the comparisons.

^{6/} Wooten, Hugh H., and Anderson, James R., Agricultural Land Resources in the United States--With Special Reference to Present and Potential Cropland and Pasture. USDA, Agr. Inf. Bul. 140, June 1955.

HOGS

Pounds of Feed per Pound of Gain

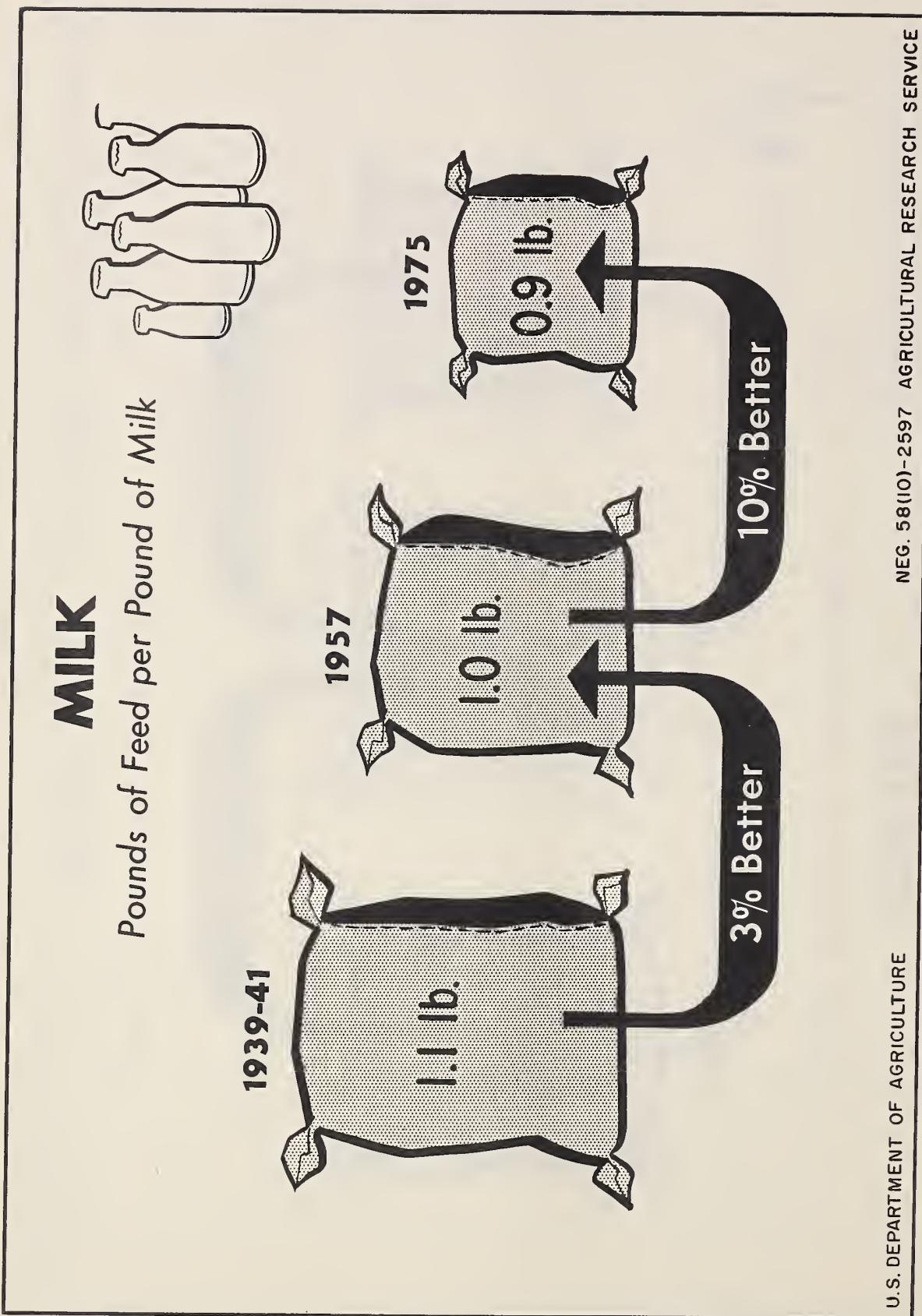




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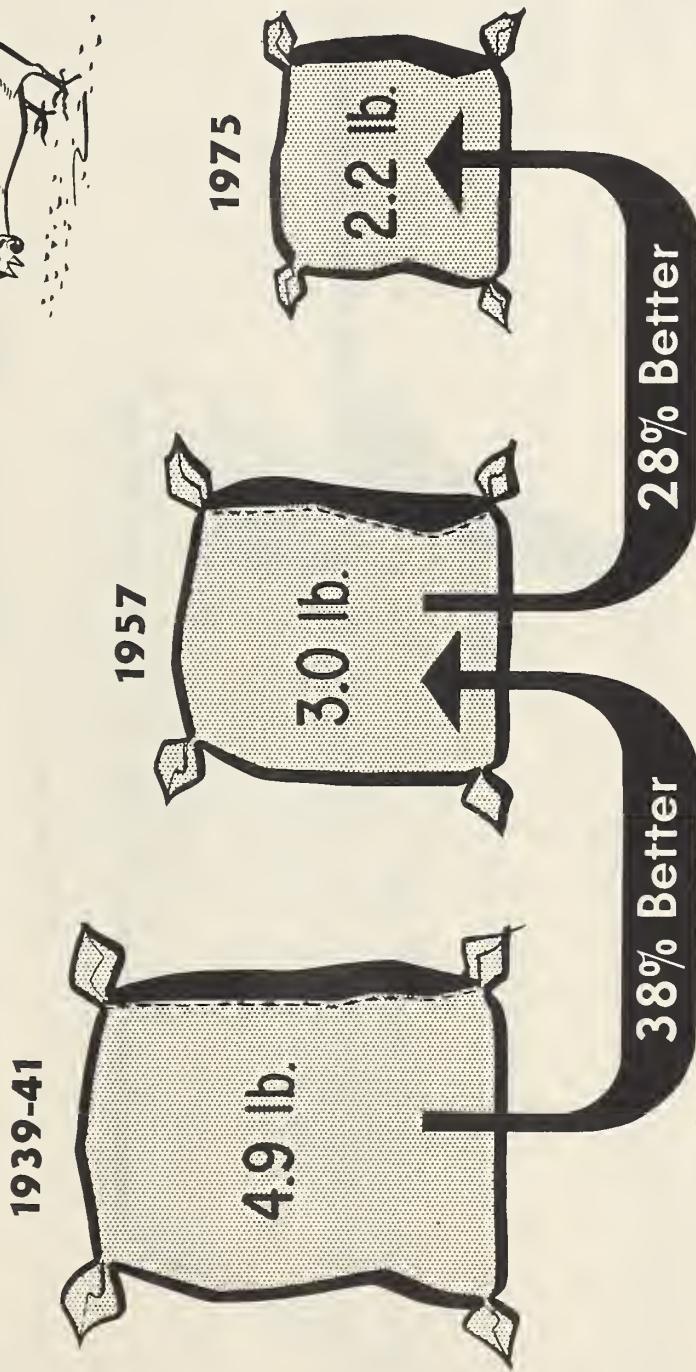
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Figure 13



BROILERS

Pounds of Feed per Pound of Gain



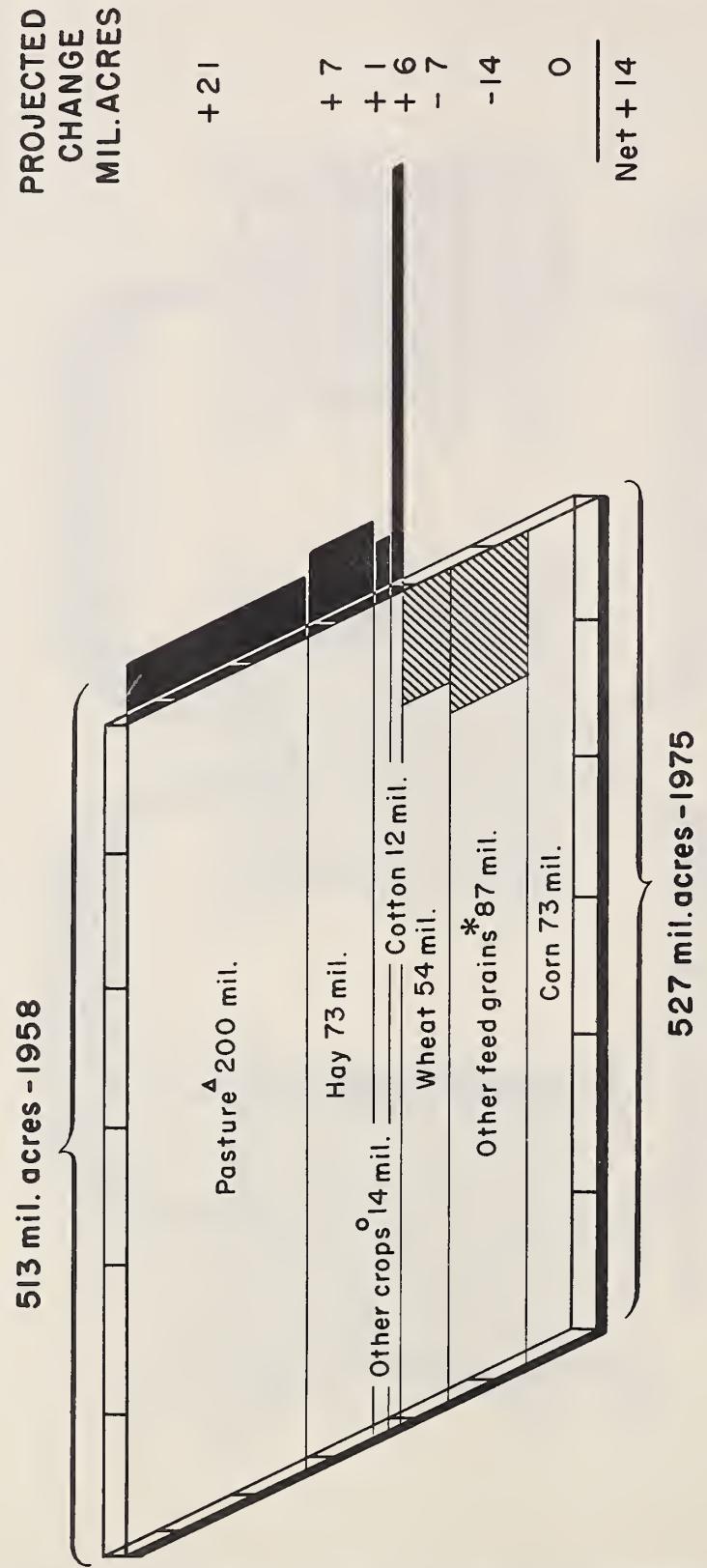
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Figure 15

LAND USE ADJUSTMENTS

Acres Harvested 1958, and Projected Needs 1975

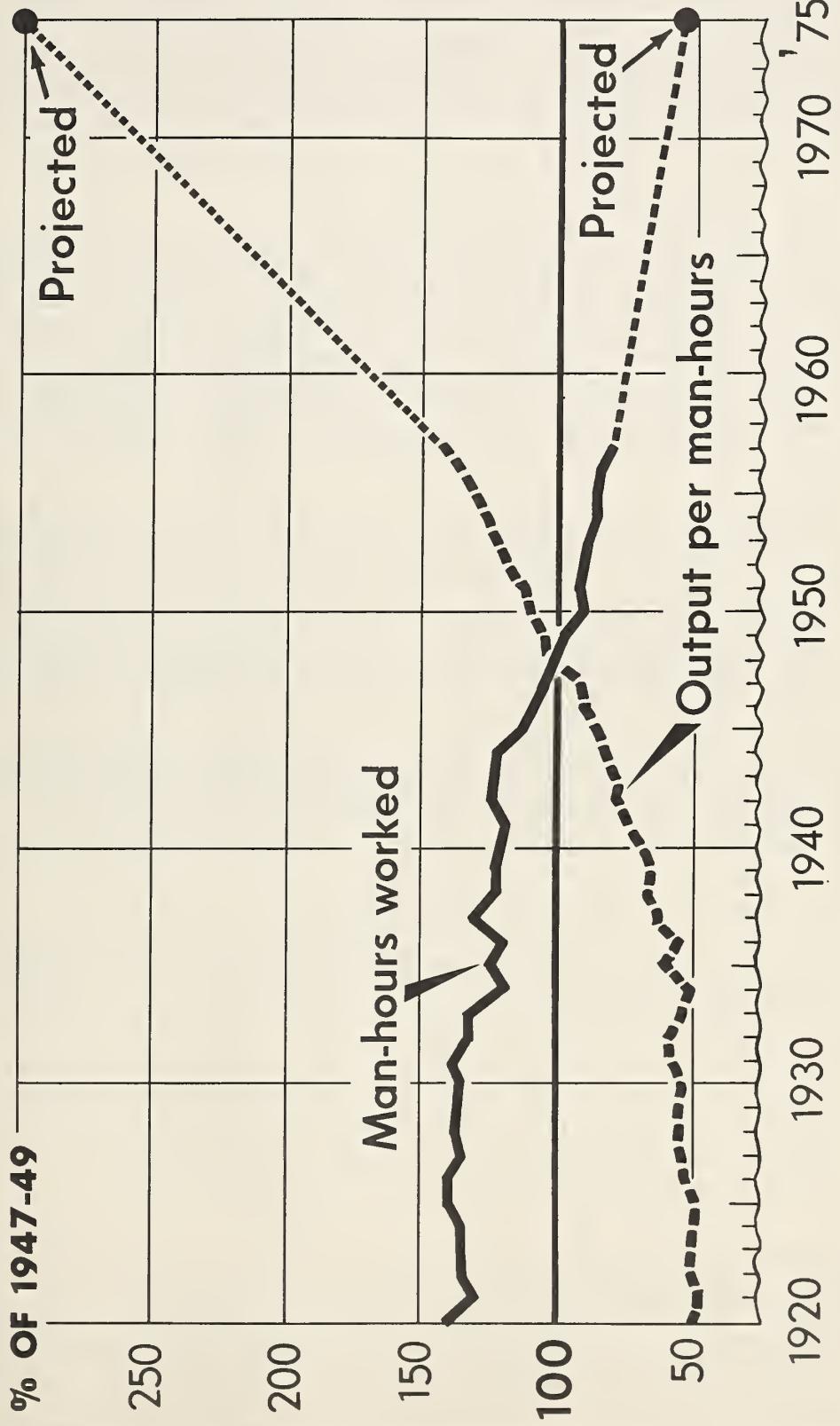


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Figure 16

FARM LABOR PRODUCTIVITY



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Figure 17

We shall continue to face the two major types of adjustments that we face today, (1) that of adjusting resource use within agriculture to attainable markets in a way that will increase incomes and equalize returns for comparable services, and (2) that of assuring farm people ready access to and adequate training for nonfarm occupations that offer them a better opportunity than does agriculture. ^{7/} If the per capita income of farmers is to increase the 40 to 50 percent that will be required in the next two decades for them to keep pace with the rest of the economy, we shall need to devote all possible energies to these tasks.

We shall need to accelerate our positive programs that recognize, not only that we have excess productive capacity in agriculture, but also that the withdrawal of a single resource such as land or labor will not affect production materially when other yield-increasing inputs are substituted. Programs patterned after that part of the Soil Bank that encourage withdrawal of whole farms will minimize the program-defeating tendency to substitute fertilizer and other inputs for land and labor. But these programs will need to be stepped up greatly if we are to bring production in balance with demand.

It seems probable that we could reach a point at which aggregate output was in fair balance with demand and still have too much of certain commodities. We tend to favor a sort of "right-to-work law" in agriculture which retains for the individual a freedom of choice in use of his resources, but it seems clear that agricultural programs of some type will continue to be necessary for such commodities as wheat for which we have the capacity to produce far in excess of demand.

Currently, we are producing about 10 pounds less meat per capita than we did in 1956. If it were feasible to increase our meat production by about 10 pounds per capita (about 18.5 pounds live weight), all of it beef, we would need about 28 million more acres of cropland equivalent. ^{7/} This would be in contrast to the 30 to 35 million acres from which, apparently, this year's production will go into stocks.

Action required in solving our adjustment problems is the subject of two of the subsequent papers. But I might mention here one suggestion warranting further study for use in specialized wheat areas. This is the use of land easements to reduce production. ^{8/} A lump-sum payment for foregoing the right to produce a certain commodity or group of commodities on a property during the life of the contract would deter the capitalization of such payments into land values. It has been said that some of our annual program payments were capitalized into food values and that the higher land values act as a deterrent to more extensive use of the land.

^{7/} Based on land requirements for beef-cattle production in 1957 and an assumed 54 percent dressing weight.

^{8/} Timmons, John, and Chryst, Walter, Other Institutional Restraints. A talk presented at the conference on Problems and Policies of American Agriculture, Ames, Iowa, October 1958.

Our greatest need, of course, is to find a better way to eliminate the apparent conflict between the individual producer and the commodity group of which he is a member. Programs that may be needed to achieve an acceptable balance between production and demand would be more successful if producers were to visualize them as truly self-help programs, which are to their own long-time interest, rather than as programs imposed on them, which, at best, are to be tolerated.

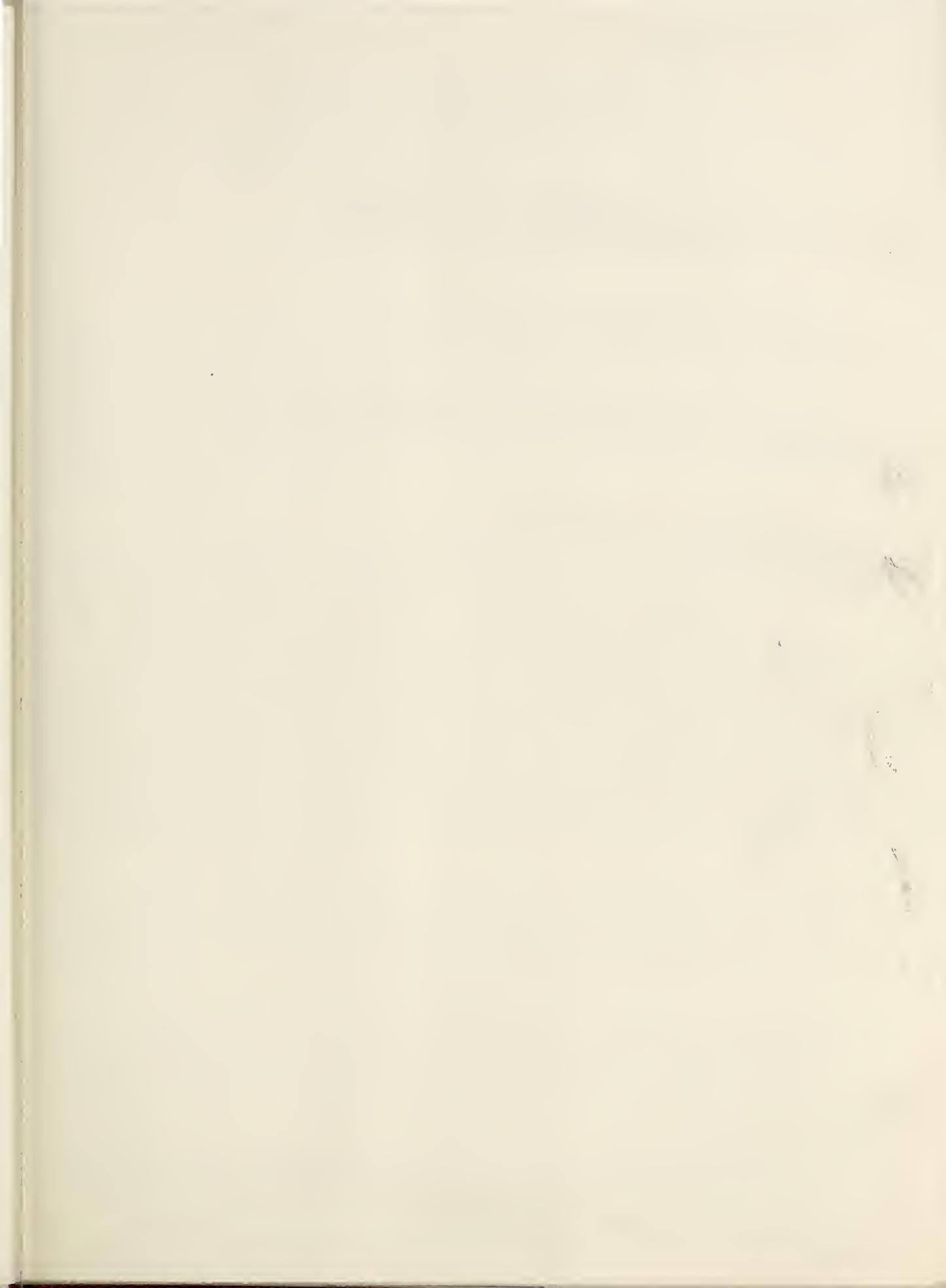
On what might be termed the negative side, two additional things appear to need emphasis. One is that despite the suggestions of some persons to the contrary, and despite the causal relationships between technology and the pressure of supplies on demand, it would be false economy to try to slow down the technology and the research that have made our abundance possible. Through technology and research, our agricultural scientists have contributed greatly to the general welfare, to our gross national product, and to the release of some 88 percent of our people from the land to occupations in which they can make a greater contribution to, and can derive a greater share of, our gross national product. As Dr. Jose Mora put it so well, it is our research and our scientists who are "making cheap and plentiful what was once so costly and dear." 9/ Our solution lies not in a slowdown of technology, but in learning how better to use our technology for the welfare of our agriculture, our society, and the free world.

A final point is that in light of our new position as a leader in the free world and the tremendous and urgent responsibilities which this leadership entails, we cannot afford to adjust our agriculture to an economy detached from the rest of the world. 10/ Neither space nor the nature of this assignment permit elaboration of this point, but it is a sobering thought that warrants serious consideration by all of agriculture and, indeed, by all of our society, as we struggle with our adjustment problems.

9/ Prof. Jose A. Mora in The Lamp, 1958 Fall Issue.

10/ For a very stimulating discussion of this topic, see Prof. Charles Hardin's paper "Political Restraints on Adjustments," presented at the Conference on Problems and Policies of American Agriculture, Ames, Iowa, October 1958.





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UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

THE ROLE OF AGRICULTURAL ESTIMATES IN THE OUTLOOK

Talk by Sterling R. Newell
Agricultural Estimates Division
at the 36th Annual Agricultural Outlook Conference
Washington, D. C., November 18, 1958

The quickest way I know to point up the importance of the agricultural estimates work to this outlook program is to ask you to visualize how you would go about preparing an outlook statement on, say, wheat, corn, tobacco, cotton, or any other crop, or the agricultural situation as a whole, or the business situation, without any knowledge of production, stocks, utilization, prices (prices received and prices paid by farmers), gross farm income, expenditures, farm employment, wages, and in short, almost all of such fundamental statistics so many have just come to take for granted. What would you do? How would you even make a start?

I think you would feel just about as helpless as I did when, in the middle of the Luray Caverns the guide switched off all the lights. We stood rooted in our tracks. We didn't know where we were nor how we got there. As for going anywhere, we were afraid to move for fear of stepping into a bottomless crevice, or knocking the tops of our heads off on a stalactite.

In brief, then, I might say that the job of the Agricultural Estimates Division and the Crop Reporting Board is to throw the light of day on a vast area of our economy that would otherwise be in almost total darkness. Of course, I should say that there are still many areas that are not as brightly lighted as we would like to have them. There are some shadows and dark corners. But we need to build more and heavier power lines to carry the extra power before we can plug in many more lamps. On occasion we have put too much load on a single line already. You know what usually happens then--a fuse blows and, believe me, when a fuse blows we hear about it from all quarters including some of you folks in this audience.

I would like first to give a quick sketch of the scope of the Agricultural Estimates job. In essence, the job of the Crop Reporting Board is to provide objective, unbiased estimates of the what, how much, and where for crop and livestock production. That sounds simple when you say it quickly, but let's take a look.

The what means the kind of commodity. It is not enough to estimate wheat. We have winter and spring, and then spring is divided into durum and all other spring. Citrus fruit include 5 different kinds and in the case of oranges and grapefruit, 2 or 3 subclasses in some areas. Potatoes come in 6

seasonal crops. There are 7 different classes and over 20 types of tobacco, each of which requires a separate estimate. We estimate all species of live-stock. But cattle are divided into beef and dairy cattle, with age and sex group breakdown. Turkeys have to be divided into heavy and light breeds, while chickens must be separated into layers and broilers. When we are asked how many crops are estimated we generally say about 150, but when you count all subdivisions, and actually each one is a separate item, the number runs into several hundred.

The how much, of course, means supply. First the production estimates involve a determination of acres planted, acres harvested, and yield per acre for each of the segments I have just mentioned. Then, comes stocks that represent a considerable part of the supply. Stocks have to be shown in several positions, on farms and off farms. Many commodities are held in cold storage and are covered in separate reports. We also have to show government holdings on many commodities. So this simple "how much" becomes a problem of estimating supply in all segments.

Next, where is this supply? It makes a lot of difference where the supply is located so all of our estimates are made at least by States. This means that the total figures have to be shown in from 3 or 4 to as many as 48 pieces. With Alaska coming into the picture it looks as though some of our estimates will have to be in 49 pieces. But we aren't through yet. For some crops like wheat, corn, cotton, and one or two others we finally have to make estimates by counties.

I think I have covered enough to indicate the nature of the problem and the volume of work that goes into many of the statistics you use and which you will find quoted frequently in the reports you will be reviewing here in this session.

Another big segment of our work should be mentioned because of the vital part it plays in throwing light on our entire economy. To have estimates of total value, gross or net cash income, it is necessary to estimate the utilization of production coming off the farm and an average price for each. The collection of price statistics is a major function of the Agricultural Estimates Division. Estimates of average prices received by farmers are made for some 220 items. One hundred and twenty-five of these are reported monthly during the year which leaves 95 that are reported on an annual or seasonal average basis. These estimates are also made by States. To make these prices more meaningful, we collect prices of items bought by farmers. About 516 items bought by farmers are priced during the year. Most of these go into the well-known and widely-used parity index. When this index is compared with the index of prices received by farmers, the result is the parity ratio--which I am sure is familiar to all of you. As you know, some of our big action programs are based on parity.

All of these statistics on production, utilization, and prices are used in so many ways I could not begin to enumerate them here. They are, of course, used individually but they are also important parts of many other series--the national income series, for example, just to mention one with which I know you are all familiar and which you use extensively.

There are a number of things I have not mentioned, such as farm employment and farm wage rates, statistics on dairy manufactures, reports of cattle on feed, hatchery reports, farmers' intentions to plant, and the pig crop reports, some of which--particularly the last mentioned--are in themselves outlook reports. About 500 reports are released each year from Washington. These reports--issued weekly, monthly, or quarterly--provide guidelines for current production and marketing operations and then become a part of the body of basic statistical data.

The entire estimating service is cooperative in the fullest sense. The larger part of all information is obtained from a corps of about 3/4 of a million individual farmers and business men who cooperate with their fellows and with the Department to pool their information for the common good. For the most part, the Department is dependent upon the willingness of these voluntary reporters to complete and return questionnaires with no reward other than the knowledge that they are performing a public service and the value they obtain from unbiased, factual information as an aid to them in carrying on their operations. The largest individual group of cooperators is about a half million individual farmers who receive one or more inquiries a year. Last year the Division mailed about 9,300,000 questionnaires and distributed about 13,000,000 copies of the reports. I would like to emphasize that the return of the questionnaires is purely voluntary on the part of the respondent. Some of you folks in the States have been of very real assistance to us in pointing out to groups of farmers and others the importance of reliable information and in encouraging farmers and others to return the schedules. We certainly appreciate this assistance and hope that my discussion here will encourage all of you to help us out as much as you can. We feel that in your position in the States where you make many important analyses for the benefit of your farmers, you can be most effective in pointing up to them the importance of the information and how their cooperation is of real benefit to them individually.

This program is carried on through 42 regular State offices that cover the entire continental United States and the Territory of Hawaii. We haven't opened up an office in the new 49th State, but perhaps we will one of these days. In 41 States and Hawaii the work is carried on in cooperation with the appropriate State agency, usually the State Department of Agriculture. Most of these States are providing additional facilities that make it possible to cover special problem areas of a local nature. Most frequently this is concerned with providing county estimates, State price reports and index numbers, and things of that sort that are of primary concern in the State. The cooperative reports issued at the State level are not included in the 500 I mentioned previously. If there are needs for certain types of information in your State, by all means see your State Statistician and talk the problem over with him. It may be possible to interest some of your local State agencies in providing an additional power line into some of these dark or shadowy corners.

The Division is constantly seeking ways of improving the service. Over the years the accuracy and reliability of the reports has been gradually improved. This comes about by reason of the fact that the Division is constantly engaged in what you might call an operating type of research directed toward the more economical use of facilities, developing new analytical techniques,

and improving the reports that are released. Actually there have been a number of significant developments in this area without which it would have been impossible to keep abreast of the some 73,000 special requests for information which we have received for each of the past 2 years.

There have also been some very important additions to the service in recent years. I will take time to mention just a few.

1. A breakdown of potato production into 6 seasonal groups and the addition of 4 monthly potato stocks reports.
2. Shifting from antiquated containers to a weight basis in estimating commercial vegetable production.
3. Full coverage of vegetable production begun in 1952.
4. Expansion of the cattle-on-feed reports from 3 to 21 States.
5. Quarterly pig crop reports in 9 leading hog-producing States. This was a cooperative program with the individual States.
6. The development of weekly broiler placement reports.

There are many more that might be listed but I want to move on to another important part of the program that is of comparatively recent origin.

I said earlier that we need more and heavier power lines in some areas. What I had in mind was the pressure that we are constantly getting for more data, more accurate data, and a speedup in the release of data after a survey is made. Ever since about 1954, we have been working on ways and means of accomplishing some of these things through a large-scale research program. That work has taken two main directions.

First of all, there is a real need for introducing more modern sampling procedures into our large acreage and livestock surveys. You are all familiar with the advances that have been made in methods for conducting sample surveys during the past 20 years. We have conducted pilot studies in the South, the North Central region, and the Western Plains area to learn how these newer approaches could be used most effectively.

Another line of activity in our research involves looking into the possibility of improving yield forecasts and production estimates by making detailed fruiting observations on growing plants in sample fields and working out relationships between those observations and final yields. Studies have been conducted on cotton, corn, winter wheat, and soybeans. Similar work has been conducted on fruit and nuts in California, Oregon, and Florida. Studies were begun on sour cherries in Michigan and on apples in New York this past season. Most of this work on fruit and nuts has been carried on as a cooperative activity with State agencies, usually under matching fund arrangements with the Department.

I might mention just one example of how some of this research has already paid off in a big way. In Florida, where such methods have already been used for orange and grapefruit forecasts for several years, their value was

demonstrated dramatically when the severe freezes occurred last December. Immediately the market became chaotic. By checking fruit damage in the same sample groves where fruit counts and size measurements had been made earlier in the season for yield forecasting purposes, it was possible to get a quick and accurate appraisal of freeze damage. Industry people say this meant a tremendous amount of additional money in growers' pockets. The survey showed that about two-thirds of the crop was still fit for the fresh fruit market and that much of the damaged fruit was still usable if picked quickly. This stabilized the situation and transformed a buyers' market, with distress prices, into a more normal marketing situation. Prices to growers were quickly adjusted in line with the true supply situation.

Still a third activity is concerned with the use of electronic computing equipment to speed up the processing of our reports. Such equipment has just been installed in the Agricultural Marketing Service and we are experimenting with its application to the regular operations.

I think that I have said enough to support the statement that Bush made in his opening remarks, that "there could not be a productive Outlook Conference without the basic material supplied by the Agricultural Estimates Division through its Crop Reporting Board." The 500 or more reports on some 150 commodities usually start with reports on what the farmer intends to plant--an outlook report in itself--and follows all the way through the season to final harvest.

At this point I would like also to mention another service, somewhat different but closely related, which is of extreme importance in orderly marketing and, in addition, adds to our knowledge of the complex nature of our entire agricultural business. The market news reports issued daily or weekly cover the marketing of fruits and vegetables, livestock, grain, dairy and poultry products, tobacco, and naval stores. These reports light up another area in our economy and add to the volume of permanent statistical information that is so necessary in the preparation of comprehensive outlook reports.

Several publications may be helpful to you in preparing outlook material for your States. First, I would call your attention to Miscellaneous Publication No. 703, entitled "The Agricultural Estimating and Reporting Services of the United States Department of Agriculture." This bulletin is now several years old but it will give you a good picture of the methods, procedures, and programs of the principal statistical agencies in the Department. Copies are probably available in your library. The other publication I want to mention is more recent and will probably be of more immediate value in your outlook work--"Agricultural Handbook No. 118" describes most of the major statistical series of the Department of Agriculture. You may also be interested in having the 1959 schedule of release dates for crop and livestock reports. This will be available soon and may be obtained by contacting the office of the State Statistician.

The last bulletin I would mention is the one showing the periodic reports of AMS. Many of you may already have this bulletin, but if not, you should have a copy. It shows not only the reports that are issued but also the names and addresses of all of the State Statisticians and the Market News Offices. "Periodic Reports of the AMS" is published annually--usually in January. When you run into statistical problems in your State, either the need for additional statistics, or the use of some of the published data, by all means, get in touch with your State Statistician.

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UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Institute of Home Economics

SEASONAL VARIATIONS IN SPENDING OF FARM FAMILIES

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Making a budget work consists in tailoring expenditures to fit income. We may begin this process by matching the outlays that must be made and that we would like to make against the income that will be available in the course of a year and adjusting these figures until we get a balance between them. But this will be only part of our task. The year is 52 weeks long. We eat week in and week out and have to pay for food and many other recurrent expenses as we go along. There are also some rather sizable outlays to be made at fixed intervals--insurance and taxes, for instance. The income out of which we must meet these demands may come in an even flow as weekly or monthly salary payments or it may be highly seasonal--concentrated in the sale of a single crop, perhaps.

To develop a workable budget we need to mesh our outlays and income in such a way that we provide for expenditures as they come due. This may mean building a reserve to carry us over periods of low income, fitting expenditures into our income pattern as much as possible, or planning for the use of credit. In any case it involves knowing quite a bit about the pattern of expenditures and the flow of income within the year.

Families that have kept accounts can look back over them and determine what these patterns are. Many families, however, will not have this guidance out of their own pasts and will need to find this information elsewhere. For families such as these the seasonal patterns revealed in the accounts of a group of Michigan farm families may prove helpful.

The data presented here are taken from farm and home accounts for the year 1957 submitted to Michigan State University by 80 families as part of the University's project in continuous accounting. The analysis of these home accounts has been undertaken as a joint project of the University and the Household Economics Research Division. This small group of families consists of people who volunteered to keep accounts or whose cooperation was enlisted through the Extension Service. They are not necessarily representative of all farm families in the State. While the exact relationships reported here might be different in a sample of families selected on a scientific basis, we think the generalizations apply to many families.

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Income

Since income forms one side of the balance in the budgeting operation, the income pattern of these families might well be examined first. Variation in the flow of their income must be taken into account as a possible reason for any seasonal variation in expenditures.

As is to be expected of a group of farm families, their income was not constant throughout the year. For the group as a whole, net cash income 1/ was lowest in the first quarter (January, February, and March) and highest in the third (July, August, and September). Income in the peak quarter was half again as large as in the low quarter.

Total family living expenditures

Spending for family living was lowest in the second quarter of the year and rose to its highest point at the year's end. The variation over the course of the year was not great, however. At its lowest, spending was little more than 10 percent below the level that would be found if there were no seasonal variation; in the high fourth quarter it was only 17 percent above this "no variation" level.

Since we are dealing with the total of the family's living expenses and the amounts involved are therefore relatively large, these differences are of a size to merit consideration in budgeting. These families were spending \$230 per quarter more at their peak rate of spending than at their lowest rate. The increase in prices over the year accounts for only a small part of this difference.

This spending pattern might be compared with that for all U. S. consumers, about two-thirds of whom are city dwellers. The personal consumption series of the Department of Commerce indicates that for the nation as a whole expenditures were highest in the third quarter of the year and then declined in the fourth quarter "about in line with the reduction in consumer incomes." 2/

The spending pattern of these farm families appears to be related to the flow of their income. Income and spending followed the same general pattern but spending lagged a quarter behind income and tended to be more moderate in its seasonal variations. The peak in income, for example, came in the third quarter and accounted for 30 percent of the year's total income while the peak in consumption expenditures came in the fourth quarter and accounted for 29 percent of the year's spending. The low point for income was in the first quarter when only 20 percent of the year's total came in, and the low point in consumption spending was in the second quarter with 22 percent of total spending.

1/ Net income before payment of income and personal taxes. Includes farm and nonfarm income.

2/ United States Department of Commerce, Office of Business Economics, Survey of Current Business, vol. 38, No. 4, April 1958, p. 5.

In interpreting this relationship it must be borne in mind that for this group as a whole expenses in a quarter were always less than income in that quarter, even when income was at its lowest point. Moreover, as the later discussion will make clear, there is considerable evidence that much of the peaking in spending must be attributed to seasonal needs for the goods bought or seasonal opportunities for spending. These considerations suggest that there may be an element of chance in the relationships between income and spending patterns found here. These findings are of considerable interest, however, since it is generally considered that the spending of farm families is not responsive to short-term fluctuations in income. They should be investigated further as opportunity arises.

Food and beverages

For the group as a whole, spending for food and beverages showed remarkable stability throughout the course of the year. Expenditures in a quarter were never less than 24 percent nor more than 26 percent of the year's total. The difference between the averages for the highest and lowest quarters was only \$20.

Many of the individual accounts showed considerable seasonal variation. When expenditures were high during the third quarter (July, August, September), it could frequently be attributed to the presence of extra farm help and guests. Bulk buying of food for preservation at home also affected the seasonal pattern of expenditures. Expenditures for meat for the freezer were usually made in the fourth or first quarters and were frequently large enough to cause considerable peaking in the individual accounts. Even expenditures for the slaughtering and processing of home-produced meat were sometimes of sufficient size to affect the seasonal patterns of individual families. Bulk purchases of fruits and vegetables for canning or freezing appeared to be less important as a cause of individual variation but nevertheless occasionally contributed to peaking in the third quarter.

In these accounts meals bought while the family was on vacation were frequently reported in recreation. Had it been possible to identify these vacation meals and transfer them to food expense, there might have been somewhat more variation between seasons in the spending for food.

Expenditures for school lunches did not cause any appreciable seasonal variation in spending for food and beverages in this group of families. Apparently the cost of school lunches approximated the cost of the meals served at home.

Clothing

Of the categories considered in this paper, clothing shows the greatest seasonal variation in expenditures. Since it is a major category, it contributes substantially to the variation in total spending already discussed.

Clothing expenditures were lowest in the first quarter, taking only 19 percent of the year's expenditure, and highest in the fourth quarter, when the amounts reported constituted 32 percent of the total. The figures for the fourth quarter are an understatement, however, as many of the accounts list gifts at this season and it can be assumed that some of this was clothing bought to be given family members at Christmas. On the figures as reported, there was a difference of about \$55 between the lowest and highest quarters, but this also understates the real difference.

Although the pattern for the group of families as a whole indicates no seasonal variation in spending for clothing in the two middle quarters, it was not unusual for individual families to have relatively high expenditures in one or the other of these as well as in the fourth. This secondary peaking occurred about equally in the two quarters so that for the group as a whole it balances out. When this is taken into consideration, it is apparent that the pattern of this group of families was to replenish their wardrobes twice a year. The buying of winter clothing seems to be rather heavily concentrated in the fourth quarter, although some of the third quarter buying may have been of this nature, particularly in preparation for the school year. The buying of light-weight clothing may take place in either the late spring or early summer.

Household operation

Spending for household operation 3/ also showed more seasonal variation than did total consumption expenditures. In this category expenditures were at their highest in the two winter quarters, the first and the fourth. These quarters together account for 58 percent of the year's spending. The difference in the amounts spent in these high quarters and the low third quarter was about \$45.

Purchases of fuel to heat the house account for much of the rise during the winter months. Payments to household help during the first, second, and fourth quarters when more homemakers were employed off the farm also had some effect. Other expenditures included in this category did not appear to be seasonal in nature.

Medical care

This category showed relatively little seasonal variation in expenditures for the group of families as a whole. The quarters never varied as much as 10 percent from the amount the family would have spent had the distribution between the quarters been even. What little variation there was was in the direction of higher expenditures in the first and fourth quarters and can be attributed largely to the higher incidence of illness in the winter months. The difference between expenditures in the high and low quarters was only \$12 for the group as a whole.

3/ Includes minor items of furnishings and equipment.

Individually, however, families showed considerable seasonal variation in their medical expenditures. It was not unusual for a family to spend over half its year's total in one quarter, and conversely, in another quarter to spend little or nothing. This is to be expected from the nature of medical expenses. Some, like the purchase of standard remedies, preventive care such as dental and physical checkups, and the treatment of chronic conditions, are routine and repetitious, but others, those related to acute illnesses, are unpredictable and spasmodic in occurrence. This is what makes it so difficult to budget for medical care except through insurance.

Education and recreation

The families submitting these accounts showed great variation in their spending for education and recreation from one season to another both as a group and individually. The low and high spending periods for the group occurred in the middle quarters of the year-- low in April, May, and June (approximately 20 percent of the year's outlay), and high in July, August, and September (32 percent of the year's outlay). Contributing to the high spending in the third quarter were, on the education side of the ledger, tuition and other school expenses, and on the recreation side, vacations (which could include food, lodging, and transportation), trips to county fairs, and payment of dues to organizations. It was not unusual for some of these families to spend one-half or more of their year's outlay in one quarter, commonly in July, August, and September.

Although there was as much seasonal variation percentagewise in education and recreation expenditures as in any of the categories considered in this paper, dollar differences in spending from quarter to quarter for the group as a whole were small because this is a minor category. On the average, these families spent only about \$175 per year here. Consequently the variation between high and low quarters was less than \$25.

Effect of income and family characteristics on seasonal variation in Spending

We are all familiar with the effects of income and the various other characteristics of families on the level of their annual expenditures. These relationships have been developed in the analyses of many expenditure surveys and studies of household accounts over the years. On the basis of this analysis of a rather small body of data, it would appear that these factors have much less effect on the seasonal pattern of expenditures than they do on the annual level.

Seasonal patterns of spending for total consumption and for food, clothing, and household operation were found to be much the same for families in the upper half of the income distribution as for families in the lower half, for larger families as for smaller families, for older families as for younger families. Seasonal differences in spending for education and recreation and for medical care did appear to be related to the level of income, family size, and position in the family life cycle.

In spending for education and recreation, families with incomes of \$5,000 and over, families of 5 or more persons, and families whose oldest child was 9 or more showed one general pattern and families with incomes under \$5,000, 4 or fewer members, and no children 9 or more showed another. There was greater seasonal variation in the first pattern, with approximately two-thirds of the spending concentrated in the last half of the year as contrasted with 58 percent in the case of the less well-off, smaller, younger families. In spending for medical care the more well-to-do and larger families differed from the less well-to-do and smaller families, the latter again showing less seasonal variation.

Why certain family characteristics should be related to the seasonality of expenditures for education and recreation but not to the seasonality of food, clothing, and household operation expenditures seems clear. The latter categories consist of goods or services that tend to be bought more or less repeatedly throughout the year. In most cases there is no one-time expenditure that dominates the category. With education and recreation, however, the educational expenses associated with the beginning of the school year and vacation expenses loom large in the total and both tend to be one-time outlays coming at specific periods of the year. When, therefore, a factor operates to increase one of these expenditures, as the presence of school-age children increases beginning-of-the-school-year educational expenses or high income increases the probability that the family will take a vacation, seasonal variation is also accentuated.

It is harder to explain why income and family size affect the seasonality of medical expenses. Indeed this finding may result only from chance. Medical care is, after all, one of the categories showing greatest variability in expenditures. The relationships between the patterns of the two groups were tested and found to be significantly different at the 5 percent level, but we may be dealing here with that one chance in 20.

Conclusions

The findings that are reported here are based on the accounts of a small self-selected group of farm families and may, therefore, not be representative of the spending patterns of the farm population. We think, however, that there is probably considerable similarity in the patterns of these and other farm families since we have demonstrated that characteristics such as level of income, family size, and position in the family life cycle, characteristics as to which this group can be expected to differ from the general farm population, have little influence on the seasonality of spending.

Since averages tend to balance off differences and, therefore, to even out variation, the patterns presented here can be taken as the minimum amount of variation families can expect. We think that this minimum is enough to indicate that families need to follow through in their budgeting from the allocation of amounts for the year to quarterly or monthly allotments as the expenditures will be made. They will also need to compare these with estimates of how their income will come in, and see that provision is made for meeting expenditures when they fall due.

Seasonal variation in expenditures, by quarters, for total family living and for categories, for 80 Michigan farm families, 1957

Quarter	Total family living			Food			Clothing			Household operation		
	Percent year's total	Average amount spent										
First	25	\$794	24	\$222	19	\$64	30	\$136				
Second	22	708	24	225	25	86	23	108				
Third	24	749	26	245	24	85	19	90				
Fourth	29	937	26	245	32	111	28	132				

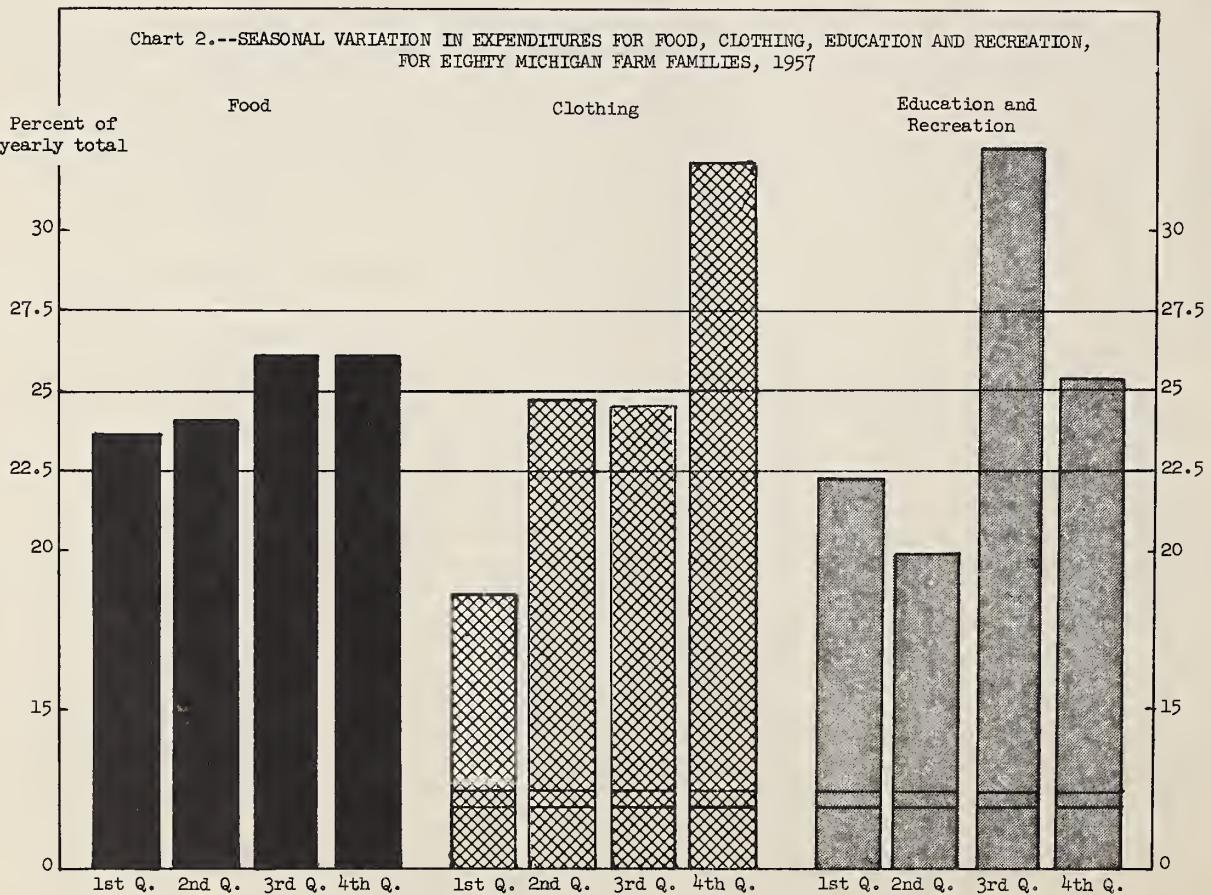
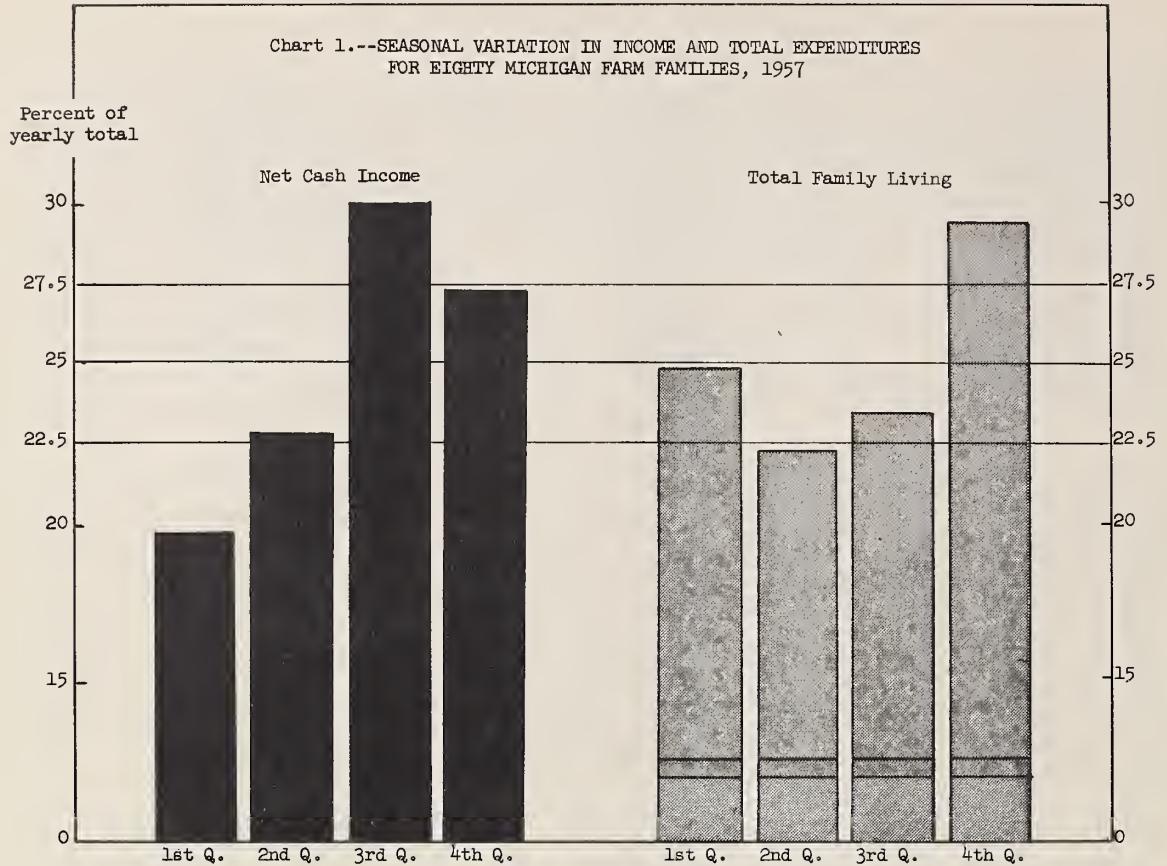
Quarter	Education and recreation total group pattern			Education and recreation Income under \$5,000 and over			Medical care Total group pattern			Medical care Income under \$5,000 and over		
	Percent year's total	Average amount spent	Percent year's total	Percent year's total	Percent year's total	Percent year's total	Percent year's total	Average amount spent	Percent year's total	Percent year's total	Percent year's total	Percent year's total
First	22	\$40	24 a'	16 a"	27	\$79	28	25				
Second	20	36	18	19	23	68	25 c'	18 c"				
Third	33	59	34	36	23	67	21 d'	28 d"				
Fourth	25	46	24 b'	29 b"	27	79	26	29				

a' a" - Difference between income levels was statistically significant at the 5 percent level as measured by an approximation to the "t" test.

b' b" - Same as above.

c' c" - Same as above.

d' d" - Same as above.



A. Summary of the United States Sugar Program

The Sugar Act is designed to maintain and protect the domestic sugar industry in a manner which will avoid excessive prices to consumers or injury to our sugar import and general export trade. This balance of interests is achieved through the adjustment of supplies that may be marketed domestically under quotas. The quantity of sugar that may be marketed in the United States exerts an important influence on the price of sugar.

When sugar requirements for the continental United States are not in excess of 8,350,000 short tons, raw value, the five domestic production areas have quotas totaling 4,444,000 tons. When requirements exceed 8,350,000 tons, the domestic areas are assigned 55 percent of such excess. The balance of our sugar requirements is imported from abroad. The Republic of the Philippines has a fixed quota. Quotas of other countries vary with requirements. On October 14, 1958, total requirements for 1958 were set at 9,200,000 tons. The following tabulation indicates the quota of each area of supply prevailing as of November 14th. Also shown are the shares of each domestic area for filling requirements in excess of 8,691,818 tons and the shares of each foreign country for filling requirements in excess of 8,350,000 tons.

	<u>Present quotas</u> <u>short tons, raw value</u>	<u>Shares in</u> <u>additional needs 1/</u> <u>percent</u>
Domestic beet sugar	2,292,488	22.3821
Mainland cane sugar	720,805	6.8871
Hawaii	700,000	12.4914
Puerto Rico	815,000	12.0613
Virgin Islands	6,100	0.1781
Republic of the Philippines	980,000	-
Cuba	3,437,582	29.5900
Dominican Republic	86,831	4.9500
Mexico	66,266	5.1000
Peru	86,867	4.3300
Nicaragua, Haiti and other countries	<u>39,340</u>	<u>1.0300</u>
Total	9,231,279	100.0000

The quotas for Hawaii, Puerto Rico, and the Virgin Islands are 1,115,479, 1,166,375, and 15,905 tons, respectively; but the Department has determined that these areas cannot fill their quotas and has reallocated 776,659 tons of deficits to the domestic beet and mainland cane areas and to Cuba. The sum of all quotas slightly exceeds the 9,200,000 ton total because of a recent technical adjustment.

When necessary to insure orderly marketings within the quota limitations, the marketing quota for any area is allotted to individual processors, and proportionate shares (i.e. acreage allotments) may be established for individual cane and beet growers.

1/ Special priority provisions govern the shares of domestic areas when total requirements are between 8,350,000 and 8,691,818 tons.

This summary has been prepared by the Sugar Division, Commodity Stabilization Service, for distribution at the 36th Annual Agricultural Outlook Conference, November 17 - November 21, 1958.

Restrictive proportionate shares (acreage allotments) are in effect in the Beet and Mainland Cane areas, and in Puerto Rico marketings of "direct-consumption sugar" to the mainland are under allotment. Marketing allotments were also in effect in the Beet and Mainland Cane areas until their recent rescission for the balance of 1958. To protect Mainland sugar refiners, the Sugar Act provides for "direct-consumption sugar" limitations within the quotas from all offshore areas, both domestic and foreign.

In addition to the price protection growers receive under the quota system, the Act provides for direct payments to growers ranging from 80 cents per 100 pounds of sugar for production of less than 350 tons of sugar per farm down to 30

cents per 100 pounds for production in excess of 30,000 tons per farm. The average is about 69 cents for all domestic producers. These payments amounted to about \$64 million for the crop year 1956/57. The money to make these payments is appropriated annually by the Congress. However, an excise tax of 53.5 cents per 100 pounds of refined sugar on either the manufacture or the importation of sugar is part of the program. Tax collections, which go into the general fund of the Treasury, are currently at an annual rate of over \$90 million.

To qualify for Sugar Act payments, producers must fulfill a number of conditions. These are: They must employ no child labor; must not market sugar beets or sugarcane in excess of the proportionate share for their farm; must pay fair wages as determined by the Secretary; and producers who are also processors must pay fair prices, as determined by the Secretary, for sugar beets or sugarcane purchased.

The protection afforded the domestic sugar-growing industry by the Sugar Act is complemented by a tariff. The rate is one-half cent per pound, raw value, for sugar imported from Cuba, 0.025 cent for sugar imported from the Philippines (0.05 cent after January 1, 1959) and 0.625 cent for sugar from other foreign countries.

The United States participates in the International Sugar Agreement of 1953, as amended. The objectives of this Agreement are to assure supplies of sugar to importing countries and markets for sugar to exporting countries at equitable and stable prices; to increase sugar consumption throughout the world; to maintain the purchasing power in world markets of sugar-exporting countries by providing adequate returns to producers and making it possible to maintain fair standards of labor conditions and wages. These objectives in many ways are similar to those of our domestic program. A new Agreement was recently negotiated at a United Nations Sugar Conference held in Geneva, will be open for signature in December and will have to be ratified to become fully effective.

The Sugar Acts of 1937 and 1948 have been term legislation which periodically came before Congress for extension and amendment. The latest amendment was approved by the President on May 29, 1956 and extends the program through 1960.

United States Department of Agriculture
Agricultural Research Service
Institute of Home Economics

USING FOOD BUDGETS IN PLANNING

By Eloise Cofer, Food Economist

Our food studies have shown that food patterns of farm families are becoming increasingly similar to those of their city cousins. Farm families have decreased home food production and increased food purchases. As a result of decreased home production the farm family frequently lowers its total consumption of such foods as milk and meat. To its advantage, on the other hand, the farm family usually buys a greater variety of foods than the family was able to have when the farm was its major source of food supply.

You may note that this trend to less home production is only one element of change among the families with whom you work. New family members are added, or present ones leave home; financial reverses mean a change in spending patterns, or new affluence raises problem of wise use of money. As the farm family ages it may consider the advisability of abandoning the farm for village or city living; or, the younger farm home-maker may consider employment in the new industry moving into the area. All of these changes open opportunities for helping the family make a good adjustment money-wise.

The food dollar is probably more frequently manipulated than other dollars spent for family living. It is stretched in times of necessity or to meet the payment on the T.V. It shrinks in value as market costs rise. It may be reapportioned to change from one standard of living to another. All too often it is considered the residuum however, and not enough attention is paid to allowing time or money to obtain nutritionally adequate food supplies.

Farm family food resources

As home management specialists you are concerned with helping families make wise use of their resources so as to have food that satisfies family needs. For most rural families resources mean money and time--money for purchasing food and skills, money and time to produce food for home use. For regardless of contrary trends, the farm family food dollar still has the added flexibility of including some home-produced food (chart 1). By home production farm families the country over get 65 percent of the total money value of milk, cheese, and ice cream, 52 percent of the meat and

poultry and 39 percent of the fruits and vegetables they consume. From this it is apparent that though total home production has decreased families still produce in greatest quantities those foods that account for the greatest share of the money value of food (chart 2). For when we combine expenditures for purchased with the money value of home-produced food, we see that more than half of this total represents--milk, cheese, meat, poultry--including eggs, dry beans and peas--food important not only for protein but also for minerals, vitamins, and food energy. Vegetables and fruits take 19 cents, grain products 11 cents and other food 17 cents. This charting of the money value of food is just another way of showing family food patterns.

The food pattern of an individual family probably develops during early years of family additions and may change in quantity rather than pattern during the later years of family subtractions. In this interim alterations may occur due to nutrition education, illness--or perhaps for farm families through a decrease or increase of home production and preservation.

USDA food plans

The USDA food plans are guides based on U. S. food patterns for helping families determine the quantities of food needed for a nutritionally adequate diet and for estimating its cost.

The plans are developed for three different cost levels--low-cost, moderate-cost, and liberal. This permits families to choose a plan that is suitable for their income level or level of food expenditure. For all of the plans, quantities are suggested for eleven groups of food. The foods in each of these groups have similar nutritional content and/or place in meals.

Eleven food groups

Milk, cheese, ice cream	Potatoes
Meat, poultry, fish	Citrus fruit, tomatoes
Eggs	Dark-green, deep-yellow
Dry beans, peas, nuts	vegetables
Grain products	Other vegetables, fruits
	Fats, oils
	Sugars, sweets

Such grouping of foods makes it easy to adapt the food plans to differences in family food tastes or cultural patterns.

Bases for developing food plans

For the present plans we observed the amounts of food consumed by nonfarm families at three income levels: \$2,000 to \$3,000, \$4,000 to \$5,000, and \$6,000 to \$8,000 (table 1). 1/ With these average quantities as guides we developed separate plans for 20 sex-age groupings for each cost level. We then modified these just enough to provide the National Research Council's recommended dietary allowances.

These adjustments in amounts of food were necessary both to have all of the individual plans nutritionally adequate and to have the calorie level suitable for the general average of the population at "ideal" weight.

Plans for individual families are made by adding together for the family members the amounts of the food groups suggested. The plans and a discussion of their development were published in the October 1957 edition of Family Economics Review. Reprints of this article are available on request.

Enough food is provided in the plans for natural refuse in food preparation, for loss of vitamins in cooking all foods, for discard of fat in meat as well as for some plate and kitchen waste of all foods. More extra food is provided for the liberal than the moderate-cost and for the moderate than the low-cost plan. Quantities may need to be adjusted to the individual's need for calories as indicated by his activity, height, and weight. Any decrease in quantity of food to lower calories should be made so as to lower the nutrient level of the plans as little as possible.

It is assumed that families following the plans make selections of foods within each food group at least as good as the average reported in household food surveys and per capita food supply reports.

Relative economy of foods in plans

When we compare the quantities of food for the three plans we can see why they differ in cost (table 2). The low-cost plan suggests larger amounts of the relatively inexpensive dry beans, peas, and nuts, potatoes, and grain products than the moderate or liberal. The quantities of the meat, poultry, fish group are greater in the moderate-cost and liberal plans.

An effort to make the best choices for the money spent--nutrition-wise--is particularly important for the nutrients in which the diets may be below recommended allowances. For example, thiamine (chart 3). Here the relative economy of enriched grains, dry beans, peas, and potatoes is obvious. In the case of vitamin A value (often low in farm diets) the case for including adequate amounts of the dark-green and deep-yellow vegetables group can be seen (chart 4). Although this group of food is relatively expensive on a per pound basis as compared with other vegetables,

1/ Farm family food records were not used because their pattern of eating are not always related to their income level.

as a source of vitamin A value for money spent it is far ahead of other groups. This group, too, is one of the inexpensive sources of ascorbic acid (chart 5). Since one or more of these vegetables from this group can be grown in any home garden they deserve especial emphasis.

Cost of food plans

The question uppermost in the minds of homemakers considering one food plan or another is "How much does it cost?" To keep informed on the current cost of the plans we estimate their cost periodically using the food prices collected by the Bureau of Labor Statistics. You no doubt have seen the "Estimated Cost of One Week's Food" as published in Family Economics Review. A summary is given in table 3 for your convenience.

The cost of the plans assumes 21 meals at home per person. Meals purchased away from home will cost more per meal and therefore families have to allow more for the total if they eat some of their meals out.

The cost of the plans for any size or makeup of family can be found by adding together the cost for individuals. Larger families are assumed to be able to buy and use food more efficiently or at least with less waste than smaller families. Therefore, when making the cost estimates of the plans we add 35 percent to the total estimated cost for a person living alone, 20 percent for the 2-person family and 10 percent for the 3-person family. Note the effect of age of family members on the cost of feeding a family following the moderate-cost food plan (chart 6).

Budget counseling with the food plans

One of the obvious uses of these food costs is for comparison with the family's present food expenditures in counseling on food money management. Recently, we had a letter from a homemaker with two school age children who was spending in her words "more than a dollar a day per person for food"--she had calculated that this represented 42 percent of their take home pay. Yet, she was aware of the need to feed her family well and gave their present state of good health as proof of her success.

By comparing her weekly food expenditures of \$28 to \$30 to the August estimate of the food plan costs we saw that she was spending a little more than would be necessary for the low-cost food plan and somewhat less than for the moderate-cost. We would estimate the family's take home pay at about \$65 to \$75 a week. This would put the family in an income class of about \$3,000 to \$4,000. Referring to Report No. 1 of the 1955 Household Food Consumption Survey series--Food Consumption of Households in the United States, we can see that the average 4-member nonfarm family in the \$3,000-3,999 income class spent about 45 percent of their income after taxes for food. With these assurances we could write the lady that she was not spending an excessive amount of their income for food. By sending her some publications such as "Family Fare" and "Food for the Family with School Children" we hoped she would find some suggestions on ways she might make further savings.

Home production adds to money value of food

Often families producing some of their own food can afford a more expensive plan than their income indicates. In 1955 farm families in the \$2,000-2,999 income class spent only 37 percent of their income for food as compared to 48 percent spent by urban families. However, the farm families had food valued at 63 percent of its money income. Home production of food made up the difference. These families were eating at a moderate-cost level on a relatively low money income.

Farm families at the higher income levels had food of a money value similar to the urban. Their cash outlay to the grocer, however, was about 34 percent less than that of the urban families. Or looking at it from another angle because they produced food on the farm their income was higher by the value of that food.

In helping a family select a plan, one needs to start with their present consumption and suggest alterations that will improve it nutritionally, or fit it better to the total family budget.

Estimating cash needed for food

After the family selects a plan they can afford and wishes to follow, the food plan quantities are valuable for suggesting the amounts of food to produce and/or buy for an adequate diet. If some of the food is home-produced an estimate can be made of additional foods needed and the cash needed to buy them. For example, table 5 shows the food needed for a family of four with school age children, using the moderate-cost plan. This family produces some milk and meat, all of their eggs as well as some fruits and vegetables. A rough estimate can be made of the cash needed by multiplying the pounds of food the family plans to buy by the per pound costs of the respective food groups. Prices of such food groups are not usually published but we compute them periodically when estimating the food plan costs as they appear in Family Economics Review. These prices for August 1958 are shown in table 5. You will note that they are different for the different food plans, for they reflect the buying habits of the families in the three income groups.

For the family used in the example, the cost of purchased food would be about \$785 a year or \$15 a week plus cost of tea, coffee, and condiments. Their home-produced food provides about half of the money value of the diet if the moderate-cost plan is the guide. Such an estimate is rough, of course, since the per pound money value of the food that is home-produced may represent more or less expensive items than the average. For example, the citrus fruit that is purchased to complete the suggested quantity of citrus fruit and tomato may be more expensive per pound than the tomatoes that are home-produced, thus making the amount of money set aside for purchases of this group less than would be needed.

Other uses that can be made of the cost figures of the plans are to estimate:

1. The cost of adding a new family member.
2. The amount to subtract when a young person leaves home for college.
3. The cost of feeding hired help.
4. The base of charge for boarders.
5. The value of home-produced food to the family economy.

Similarly, the family food plan quantities can be used to:

1. Judge in a rough way the nutritional adequacy of food consumed by a family.
2. Estimate quantities to be produced or conserved in production and food preservation programs.
3. Make changes in family food buying, production, or preservation habits as size of family changes.
4. Guide family buying of food when home production is curtailed.

Table 1.--Food consumption of nonfarm families, one week, spring 1955 1/

Food group	Consumption of food at home per person, by nonfarm families with incomes of--		
	\$2,000- 2,999	\$4,000- 4,999	\$6,000- 7,999
Milk, cheese, ice cream.....quarts..equiv.	3.9	4.6	4.7
Meat, poultry, fish (including bacon, salt pork).pounds.....	4.1	4.3	4.8
Eggs.....number.....	6	6	7
Dry beans, peas, nuts.....pounds.....	.3	.2	.2
Grain products.....do.....	3.0	2.5	2.4
Citrus fruit, tomatoes.....do.....	2.1	2.4	2.8
Dark-green and deep-yellow vegetables.....do.....	.6	.6	.6
Potatoes.....do.....	1.7	1.8	1.8
Other vegetables, fruits.....do.....	4.7	5.1	5.9
Fats, oils.....do.....	.9	.8	.8
Sugars, sweets.....do.....	1.2	1.1	1.1

1/ From data in Food Consumption of Households in the United States, Report No. 1, and Dietary Levels of Households in the United States, Report No. 6, 1955 Household Food Consumption Survey.

Table 2.--Quantities of eleven food groups suggested in USDA food plans per person per week 1/

Food group	Low-cost plan	Moderate-cost plan	Liberal plan
Milk, cheese, ice cream, quarts..equiv.	4.6	4.8	4.9
Meat, poultry, fish (including bacon, salt pork).pounds.....	2.5	4.0	4.8
Eggs.....number.....	6	6	7
Dry beans, peas, nuts.....pounds.....	.3	.2	.1
Grain products.....do.....	2.8	2.5	2.5
Citrus fruit, tomatoes.....do.....	2.1	2.4	2.9
Dark-green, deep-yellow vegetables.....do.....	.6	.6	.7
Potatoes.....do.....	2.1	1.8	1.7
Other vegetables, fruits.....do.....	4.3	5.0	5.8
Fats, oils.....do.....	.4	.6	.6
Sugars, sweets.....do.....	.6	.8	1.0

1/ Quantities for 20 sex-age groupings were averaged together, using the distribution of persons in nonfarm families as found in the 1955 Household Food Consumption Survey.

Table 3.--Estimated cost of one week's food for selected family groups--
August 1958 1/

Sex-age group	Low-cost plan	Moderate-cost plan	Liberal plan
	Dollars	Dollars	Dollars
Woman, 21-34 years	7.50	10.50	11.50
Family of two, 21-34 years	15.50	21.00	23.50
Family of two, 55-74 years.....	14.00	19.00	21.50
Family of four with preschool age children	21.00	27.50	31.50
Family of four, young school age children	24.00	32.50	37.00
Family of four, two adolescent children	27.00	37.00	41.75

1/ These estimates were computed from quantities in low-cost, moderate-cost and liberal food plans published in tables 2, 3, and 4 of the October 1957 issue of Family Economics Review. No allowance is made in these costs for home-produced food, but assumes that all food is purchased. The cost of the food plans was first estimated by using the average prices per pound of each food group paid by nonfarm survey families at 3 selected income levels. These prices were adjusted to current levels by use of Average Retail Prices of Food in 46 Large Cities Combined released periodically by the Bureau of Labor Statistics.

Table 4.--Estimating the yearly cost of food to be purchased by a family home producing part of its food

Source	Milk, cheese, ice cream	Meat, poultry, fish	Eggs	Dry beans, peas, nuts	Cereal, prod- ucts		Citrus fruit, toma- toes		Dark- green and deep- yellow vege- tables		Other vege- tables and fruits		Sugars, sweets	
					Qts.	Lb.	Doz.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	
Family plan <u>1</u>	1,020	900	120	40	550	550	0	150	450	1,200	150	200	200	0
Home produced	760	500	120	0	0	250	0	100	200	500	130	130	130	0
To be purchased	260	400	0	40	550	300	50	50	250	700	20	20	20	200
Price per unit .....	.28	.68	.63	.43	.35	.17	.17	.17	.07	.18	.39	.19	.19	
Estimate of cost of purchased food	\$72.80	\$272.00	--	\$17.20	\$192.50	\$51.00	\$8.50	\$17.50	\$108.00	\$7.80	\$38.00	\$38.00	\$38.00	
Total cost - \$785.30														

1/ Moderate-cost plan for family of four with school age children.

Table 5.--Prices of foods per unit, August 1958 1/

Food group	Low-cost	Moderate-	Liberal
	plan	cost plan	plan
	Cents	Cents	Cents
Milk, cheese, ice cream.....quart..equiv..	26	28	29
Meat, poultry, fish (including bacon, salt pork).pound.....	61	68	72
Eggs.....dozen.....	63	63	64
Dry beans, peas, nuts.....pound.....	31	43	50
Grain products.....do.....	26	35	39
Potatoes.....do.....	6	7	7
Citrus fruit, tomatoes.....do.....	15	17	17
Other fruits and vegetables (includes dark-green and deep-yellow vegetables)....do.....	16	18	18
Fats and oils.....do.....	34	39	41
Sugar, sweets.....do.....	18	19	20

1/ These prices per unit are those by which food plan quantities are multiplied to give the total cost of the plan for each of the 20 sex-age groupings. These group prices are based on prices paid by nonfarm families in spring 1955 adjusted to current levels by use of Average Retail Prices of Food in 46 Large Cities Combined released periodically by the Bureau of Labor Statistics. An estimated amount is also added to the total for accessories such as coffee, tea, vinegar, and spices.

Chart 1

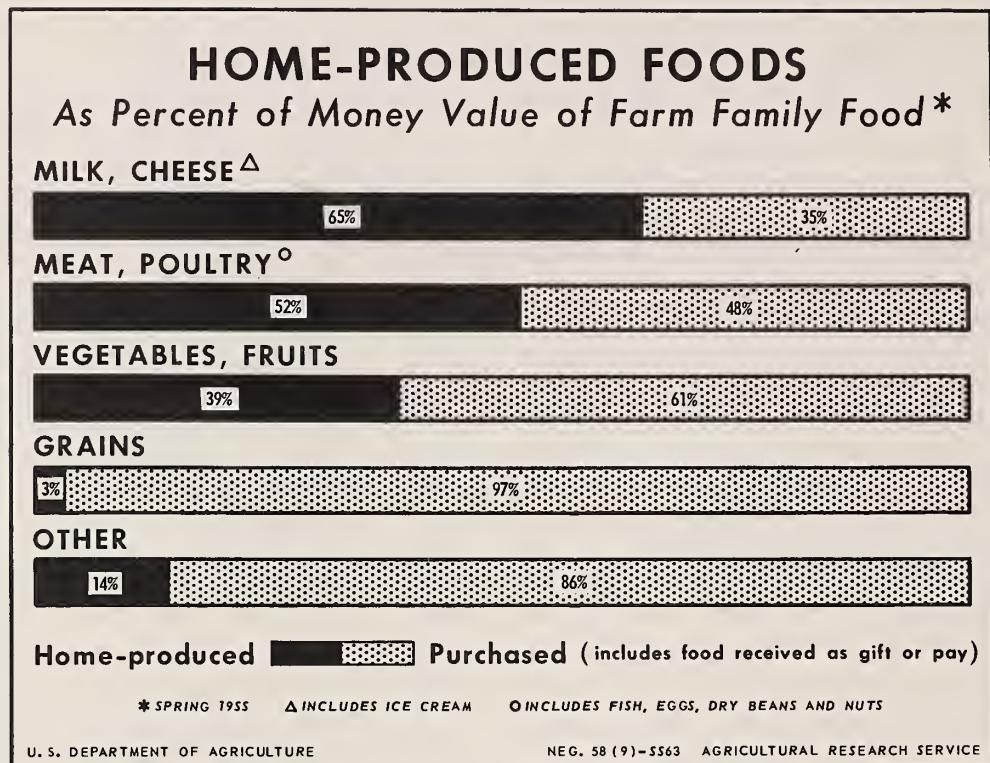


Chart 2

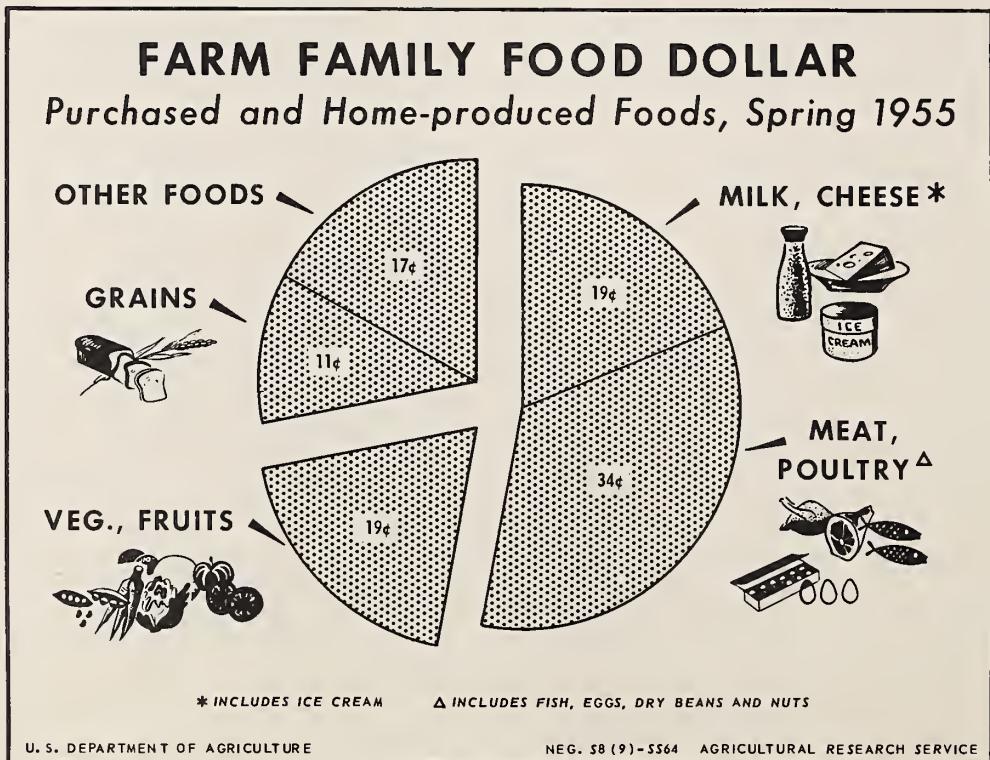


Chart 3

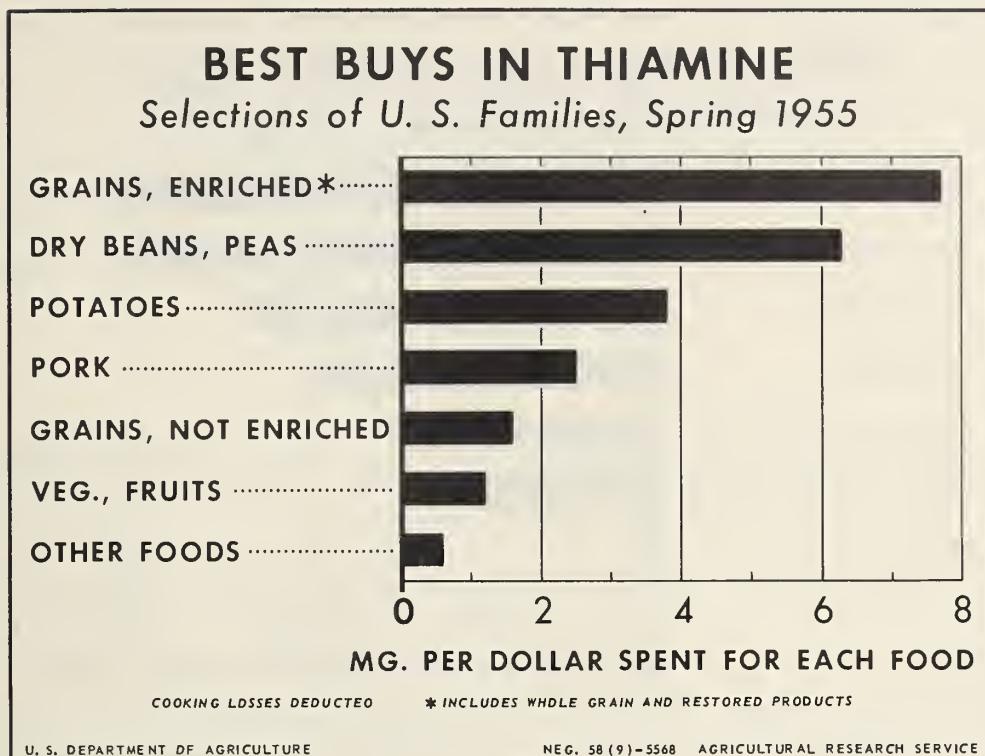


Chart 4

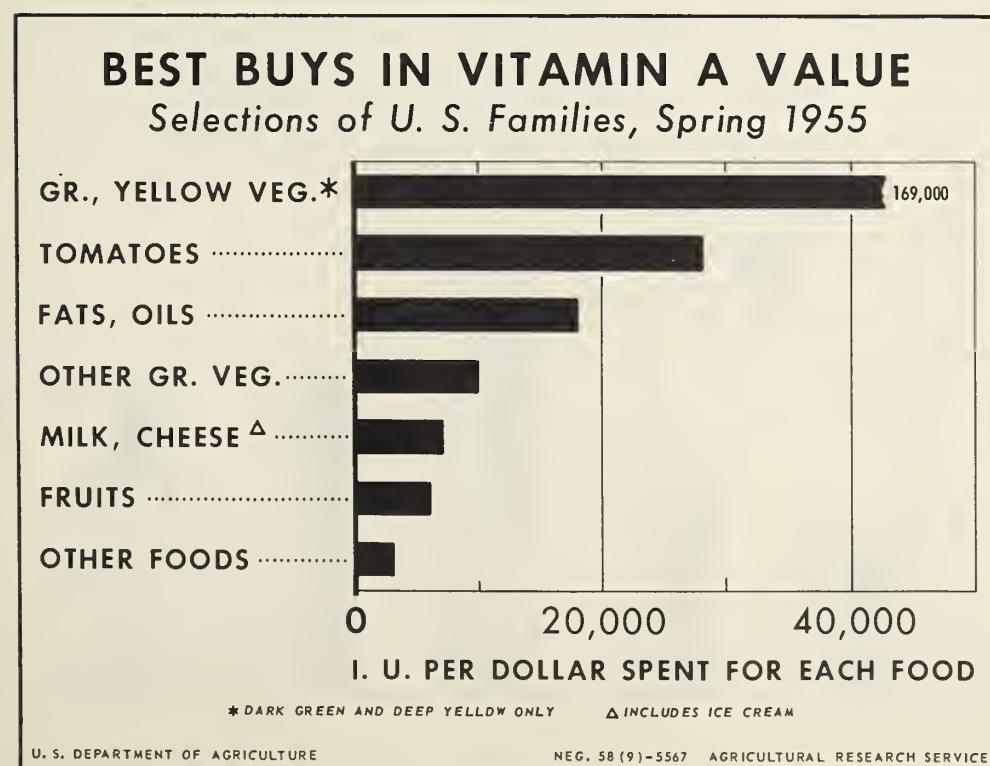
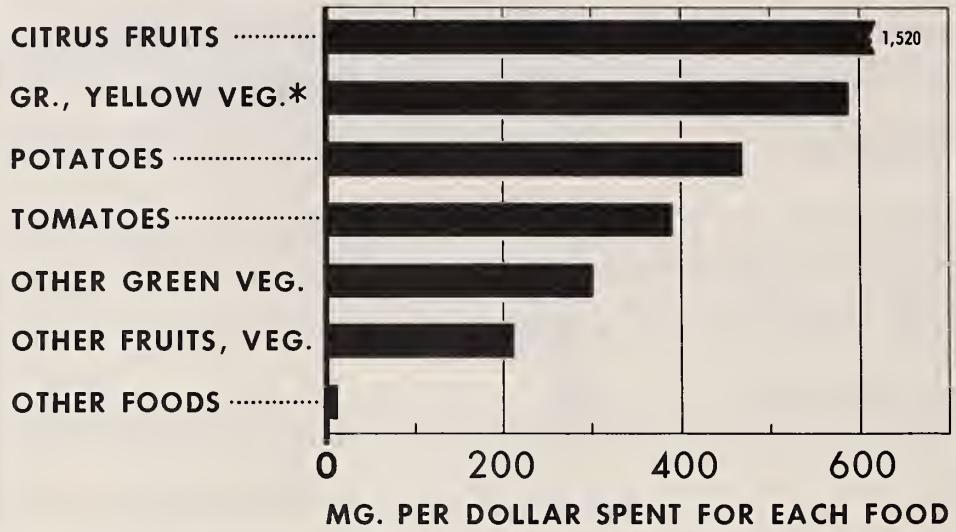


Chart 5

BEST BUYS IN ASCORBIC ACID

Selections of U. S. Families, Spring 1955



COOKING LOSSES DEDUCTED

* DARK GREEN AND DEEP YELLOW ONLY

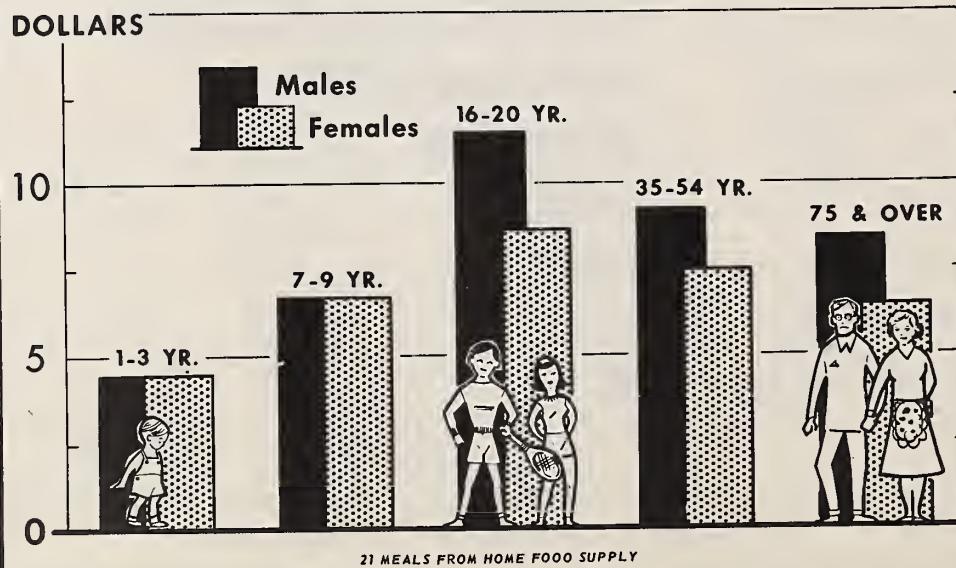
U. S. DEPARTMENT OF AGRICULTURE

NEG. 58 (9)-SS69 AGRICULTURAL RESEARCH SERVICE

Chart 6

COST OF A WEEK'S FOOD

Moderate-cost Food Plan, Aug. 1958



U. S. DEPARTMENT OF AGRICULTURE

NEG. 58 (9)-SS75 AGRICULTURAL RESEARCH SERVICE

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For release
Nov. 19 2:00 p.m.

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Institute of Home Economics

USING SPENDING PATTERNS FROM EXPENDITURE STUDIES AS GUIDES

By Lucile F. Mork, Family Economist

A simplified form that would show families how to divide their income in order to provide the essentials, plus some of the extras so necessary to happiness, would be welcome to many families. It is not possible, however, to set up a so-called master financial plan that will work satisfactorily for every family. Family needs differ so greatly that it is difficult to make recommendations unless it is possible to work very closely with the family. One family may want above all else to have a large family, another to own their farm, or just be out of debt, while still other families may place greater emphasis on the social aspects of living, and prefer to work toward improving the community in which the family lives. Actually, one family's need may be another's waste.

Many consumer studies have given useful information about ways families spend and save. This information has been helpful to those who counsel families and individuals in solving their financial problems. There is considerable evidence that many families themselves want this type of information so that they can make plans for using their financial resources. Accumulating a nest egg that will meet unexpected expenses is the incentive that keeps some families watching their finances. Facing a new situation such as a change in income, family size, or retirement is a major concern to other families that are trying conscientiously to do a good job of fulfilling the family's needs and desires.

Our most recent national study, the 1955 Study of Farmers' Expenditures, was limited, as the title indicates, to expenditures for family living and the operation of the farm. We have no current information on the division of income between consumption and savings. This paper must therefore be limited to a consideration of the consumption phases of the budget. We have supplemented these farm data with estimates of urban spending in 1955 developed from the Study of Consumer Expenditures, Incomes and Savings in 1950.

Presented at the 36th Annual National Agricultural Outlook Conference,
November 19, 1958, Washington, D. C.

One way of examining expenditure data is to look at the distribution of total expenditures for family living among the various consumption categories. If we look at the percentage of each dollar that goes for food, housing, clothing, medical care, and the other categories, we can see more easily the relationship of the various parts to each other. Likewise, we can see what shifts in spending are made by families when the whole changes, that is, income increases or decreases, the family grows or diminishes. An analysis of this kind is sometimes referred to as the pattern of spending. This concept of dividing the dollar, into percentages, seems to appeal to many families, and because it does it is a useful device.

One problem in any analysis of spending patterns is that of selecting families with appropriate characteristics. One can use the distribution of expenditures for all families, but it is probably somewhat more helpful for families in their money management if they can see how families of the same size, income, or stage in family life cycle (such as age of head) spend their money for the various categories. Those who work with families know that most families are interested in data that apply directly to them either at the present time or some stage they will be in and are planning toward.

Family spending patterns are helpful as a clue to what families consider important in family living. However, spending patterns are affected by many factors--place of residence, size of income, size of family, age of family--to name but a few. As these factors change, the percent spent for the different items changes also.

As a basis for comparison of the effect of these various factors, we are using the pattern of spending for farm-operator families. This pattern shows that farm families on the average divide their consumption dollar as follows. They spend 31 percent for food; 21 percent for housing (including dwelling upkeep, household operation, housefurnishings and equipment); 17 percent for clothing and personal care; 14 percent for transportation; 9 percent for medical care; 6 percent for recreation, education, reading; and 2 percent for all other. (See table and chart.)

Food and beverages

Let us look first at the category of food. We see that farm and urban families spend the same percentage of their consumption dollar for food, 31 percent. This is rather surprising in view of the fact that farm families still produce 40 percent of their total food supply on their own farms, but it can be explained.

Because farm families do get a part of their living from their farms--considerably more than urban families get without direct cash outlays--their expenditures account for a smaller part of their total consumption. Consequently those categories of consumption that are provided for completely through cash outlays will loom larger on a percentage basis, other things being equal, in the farm than in the city budget; the things that are obtained in part by other means will be less important. Farm family expenditures for food are, on the average, lower than those of urban families, but when taken as a proportion of a less inclusive and therefore smaller total, they turn out to be the same, percentagewise.

When income is low a larger proportion of the consumption dollar has to be used for food. Among city families with an income between \$1,000 and \$2,000, 35 percent goes for food. 1/ Smaller percentages are then spent for the things they consider less essential, or more realistically the things they can get along without. As total expenditures increase, the percentage spent for food decreases--34 percent among families with incomes of \$4,000 to \$5,000, and 29 percent among families with incomes of \$7,500 to \$10,000. Similar decreases could be shown for farm families, although at comparable income levels the percentages are smaller.

It is not that these families with more money to spend consider food any less important. As a matter of fact they are spending more for food, particularly for food away from home. The latter increases faster with income than does food at home. This is true of both farm and urban families.

Large families spend more for food than small families, both in actual amounts and as a percent of their total spending. For example, consider farm families with approximately the same income, \$2,000 to \$4,000, some with 2 members, others with 4 members, and still another group with 6 members. The largest families spend, on the average, 32 percent as compared to 30 percent for the 4-member families, and 28 percent for the 2-member families. It takes more food for the large family both at home and away from home.

The age of the head can be used as an indication of the family's position in the marriage cycle. The use of this classification reflects differences related to changes in the size and age composition of the family. Among both farm and urban families, position in the family life cycle as measured in this way has very little effect on spending for food--less than either income or family size, the proportions being practically the same for families with young and old heads.

Education has the effect of decreasing the proportion families spend for food. Among farm families with incomes between \$2,000 and \$4,000, the operators with only a grade school education spend 32 percent of their expenditures for food compared to 29 percent by those who have been to high school or beyond. The operators who went to high school spend more for food than do those who didn't, but they also increase their spending even more sharply in some other categories. As a result the percentage used for food declines.

1/ In the analysis by level of income, as elsewhere in this paper, consideration is limited to the pattern of consumption.

If the various categories were shown as a proportion of income rather than of total consumption expenditures, the proportions would be higher at the lower end of the income scale where average expenditures exceed average income and lower at the upper end where average income exceeds average expenditures for consumption and there is savings.

Housing

We have seen that the housing categories (dwelling upkeep, household operation, and furnishings and equipment) take 21 percent of the farm family dollar. This proportion is considerably higher for city families--28 percent. A large part of this difference, however, can be attributed to the way we set up the accounts for the 2 groups. The farm family presents the more difficult accounting problem. They pay rent for the farm, or taxes and perhaps mortgage interest on it. Part of this should be considered a farm business expense and part a family expense for housing. There is no division in these bills as they are paid, however, and with all the other material that has to be gotten from the family in an expenditure study, we find it almost impossible to get the data to make a satisfactory division. We have therefore followed the practice of attributing the whole expenditure to the farm. We usually compensate by setting a consumption value on the house, in one way or another, but this does not show when we are talking about dollars-out-of-pocket. The accounts of urban families, on the other hand, include rent or taxes and the other expenses of home ownership.

Most of the difference in housing expenditures is to be found in the dwelling upkeep category, which, it should be noted, also includes lodging away from home. The proportion of the family dollar that is assigned to household operation and furnishings and equipment is slightly larger among farm than city families.

Among urban families the proportion of total expenditures on the house itself and for household operation tends to decrease as income rises, while the proportion used for furnishings and equipment remains the same. As a result, the proportion of the dollar spent on the three housing categories becomes smaller. Among 4-person families this change is from 27 percent at the \$1,000-\$2,000 income level to 26 percent at the \$4,000-\$5,000 level, to 25 percent at the \$7,500-\$10,000 level. The pattern among farm families is less clear cut.

As family size increases, the housing categories in combination tend to take a smaller proportion of the total spending. Among farm families with incomes between \$2,000 and \$4,000, the drop is from 25 percent for 2-person families to 20 percent for 4-person families. This level is maintained by 6-person families. Among city families the decrease is even sharper. Both groups spend proportionately less on the house itself and for household operation as family size increases. Urban families also decrease the proportion of the dollars used for furnishings and equipment, but farm families increase these expenditures both in dollars and as a percent of total spending.

The housing categories maintain a relatively stable position in the budget throughout the family life cycle. The spending of farm families with incomes between \$2,000 and \$4,000 fluctuates from 21 percent of the total spending when the operator is under 35 to 19 percent when he is between 45 and 54, and to 22 percent when he is 65 or more. Two of the three component categories, however, show very distinct patterns. Spending on the house itself, both in total amounts and as a percent of

total spending, rises as the family moves through its life cycle. Spending for furnishings and equipment is high, both absolutely and proportionately, in the early years when the family is building up its stock of household goods and decreases in later years.

Among farm families spending for the housing categories, and particularly for household operation, tends to be higher when the farm operator has a better education. With families at the same income level, those in which the operators have only attended grade school use 19 percent of their total spending on the housing categories. Among those whose operators have attended high school, the proportion rises to 22.

Clothing and personal care

Urban families spend a smaller proportion of their dollar for clothing and personal care than do farm families, although in total amounts they usually spend more than comparable families on farms. While the latter allot 17 percent, on the average, to these categories, city families use only 12 percent here.

One reason for this difference lies in the fact that farm families have more members to clothe. Although clothing and personal care expenditures do not change in precise proportion to changes in family size, spending for these categories does increase with family size more rapidly than does total spending and becomes a larger proportion of the whole when the family is larger. Among farm families with incomes between \$2,000 and \$4,000 this shift is from 14 percent for 2-person families to 18 percent for 4-person families. Six-person families tend to spend more, but use about the same proportion of the total as do 4-person families. Among urban families the increase with the growth in size of the family continues farther up the family size scale.

Most of the items covered by the clothing and personal care categories are things that are used by individuals rather than by the family as a whole. In this they are like food and medical care and can be contrasted with the housing categories in which use is by the family rather than by individuals. Of the categories distinguished by individual consumption, clothing and personal care show a closer relationship between amounts spent and family size than do food or medical care.

The importance of clothing and personal care in the budget is also related to the family's position in its life cycle. A larger proportion is used in its middle years than earlier or later. Farm families with incomes between \$2,000 and \$4,000 average 16 percent of total spending for clothing and personal care when the operator is under 35 years old. At this time his children are still small and the family has probably not reached its maximum size. When the farm operator is between 45 and 54, 18 percent goes for clothing and personal care. This is the period when the family is at its maximum size and the needs of children individually are greatest. When the operator is 65 or more, clothing and personal care are reduced to only 14 percent of the budget. In this period the family is at its smallest and the older couple will spend less on themselves than earlier.

The level of income has little effect on the proportion of the dollar that is used for clothing and personal care. Expenditures here tend to increase at an even pace with total expenditures. Among city families of 4 persons, spending for these categories is 13 percent of total spending for families of \$1,000 to \$2,000 income and 12 percent for families with an income of \$4,000 to \$5,000. Families with incomes of \$7,500 to \$10,000 average 14 percent of total spending for these categories.

The level of education attained by the head of the family is also without marked effect on the spending pattern as it relates to clothing and personal care. Farm families with incomes between \$2,000 to \$4,000 in which the operator has had 9 years or more of schooling tend to spend more for clothing and personal care than do those families in which the operator has had less than 9 years of school. This is true of total spending also, and the proportion devoted to these categories remains the same--17 percent.

Transportation

It has been shown that transportation takes 14 percent of the farm consumption dollar. Most of this--95 percent--is used for the family share of the purchase and operation of cars and, occasionally, trucks. In our surveys, the division of total automobile and truck costs between the farm business and the family is made by the respondent.

Urban families also use 14 percent of the consumption dollar for transportation. With them public transportation accounts for about 15 percent of spending for the category in contrast to 5 percent for farm families.

Expenditures for transportation show greater response to changes in income than does any other category discussed here. Urban 4-person families almost double their expenditures when income rises from the \$1,000 to \$2,000 level to the \$4,000 to \$5,000 level, and more than double them when income rises from that level to the \$7,500 to \$10,000 level. As a consequence, transportation becomes increasingly important in the urban family spending plan and takes 11, 13, and 17 percent, respectively. Farm families increase the proportion of their dollar used for transportation even more sharply as income rises.

This may indicate that, at least above a minimum level, transportation as we have it today is something of a luxury item. This shows up again in the relationship between these expenditures and family size. As family size increases and there are heavier demands on income, the proportion that is spent on transportation decreases. Among farm families at the \$2,000 to \$4,000 level, the decrease is from 16 percent, spent by 2-person families, to 13 percent, spent by 4-person families. This level of spending is maintained by 6-person families.

As the family moves through its life cycle, from the period when its head is under 35 years and the children are small, to the period when the head is 45 to 54 years old and the family is at its largest with a wide range of interest, demands on the family purse become heavier. Families tend to increase their spending for transportation but only in proportion to other increases. Among farm families with incomes between \$2,000 and \$4,000 transportation takes 14 percent at both stages. As the family contracts in size, demands on the purse become less heavy. When the operator is 65 or more transportation expenditures fall off somewhat, but because these families are spending less on other things, this category of expenditures becomes more important, taking 16 percent of the total spending.

In view of the frequent charge that our culture is materialistic and that we use the automobile as a status symbol, it is of interest that education seems to have the effect of putting the automobile in a less important place in our scheme of things. Among farm families at the income level \$2,000 to \$4,000, those whose heads have had less than 9 years of schooling devote 15 percent to transportation, but those whose heads have had 9 years or more use only 13 percent.

Medical care

Turning now to medical care--we have seen that farm families spend 9 percent of their dollar here. Although urban families generally spend more than comparable farm families, as a percent of total spending medical care takes only 5 percent among urban families.

Medical care tends to take a smaller part of the consumption dollar as the size of the family increases. Among farm families with incomes between \$2,000 and \$4,000 the decrease is from 10 percent in 2-person families to 7 percent in 6-person families. A comparable decrease could be cited for urban families. Farm families actually spend more dollars on medical care as they get larger, but spending for other categories of consumption, notably food, clothing, and recreation, and for all of family living goes up even more rapidly, so that the proportion going to medical care goes down. By contrast, city families tend to decrease the absolute amount of their spending for medical care as well as the proportion of the total devoted to it.

Medical care is another of the categories that tends to take the same proportion of the city family's dollar, regardless of income level. Farm families tend to spend a slightly smaller percent here as income rises. They spend more for medical care at higher income levels, but they also increase their total expenditures at a somewhat more rapid rate so the percentage falls.

Young adults and children have relatively low individual expenditures for medical care. The highest expenditures for the individual tend to come as he ages. In terms of family expenditures this means that families spend more for medical care in the middle years of marriage when families are larger than they do in the early years. The decrease in family size in the later years more than balances the increase in expense per person

and expenditures drop off. When this is put in terms of the expenditure pattern, taking into account changes in other categories as well, the proportion spent for medical care is found to be constant from the early through the middle years when families are increasing their expenditures for most things. In later years, families reduce their total expenditures for living proportionately more than they do for medical care, and hence the latter rises as a proportion of total expenditures. Among farm families, expenditures average 8 percent when the operator is under 35 years of age, are still at that level when he is 45 to 54, but increase to 10 percent when he is 65 or more.

Medical care expenditures tend to increase somewhat with the level of education. Among farm families with incomes between \$2,000 and \$4,000, the increase is only from 8 percent for operators with less than 9 years schooling to 9 percent for those with 9 years or more. While it might be expected that greater emphasis would be placed on medical services by those with higher education, they may also reduce the need for some medical expenditures by greater attention to diet and other aspects of healthful living. The linkage between age and educational attainment also minimizes the effect of education on medical spending. If age were held constant, the proportion of the dollar going to medical care would rise more sharply with increased schooling.

Recreation, education, and reading

The last category that we will consider is recreation, education, and reading. Farm and urban families are much alike in their spending patterns here, using 6 percent of their total dollars.

Spending for this category tends to become slightly more important in the total pattern as income increases. Among urban families this increase is from 6 percent spent by families at the \$1,000 to \$2,000 and \$4,000 to \$5,000 levels to 7 percent at the \$7,500 to \$10,000 level.

Among farm families with an income between \$2,000 and \$4,000, large families spend more proportionately than smaller ones. Families of 4-persons and 6-persons use 7 percent, whereas 2-person families use 5. Urban families also increase the proportion of the dollar used for this category as size increases but the change is smaller.

Older families are likely to spend a smaller proportion for recreation, education, and reading than younger families. Families whose heads are close to 50 years spend the largest proportion--7 percent--with older families allotting only 4 percent.

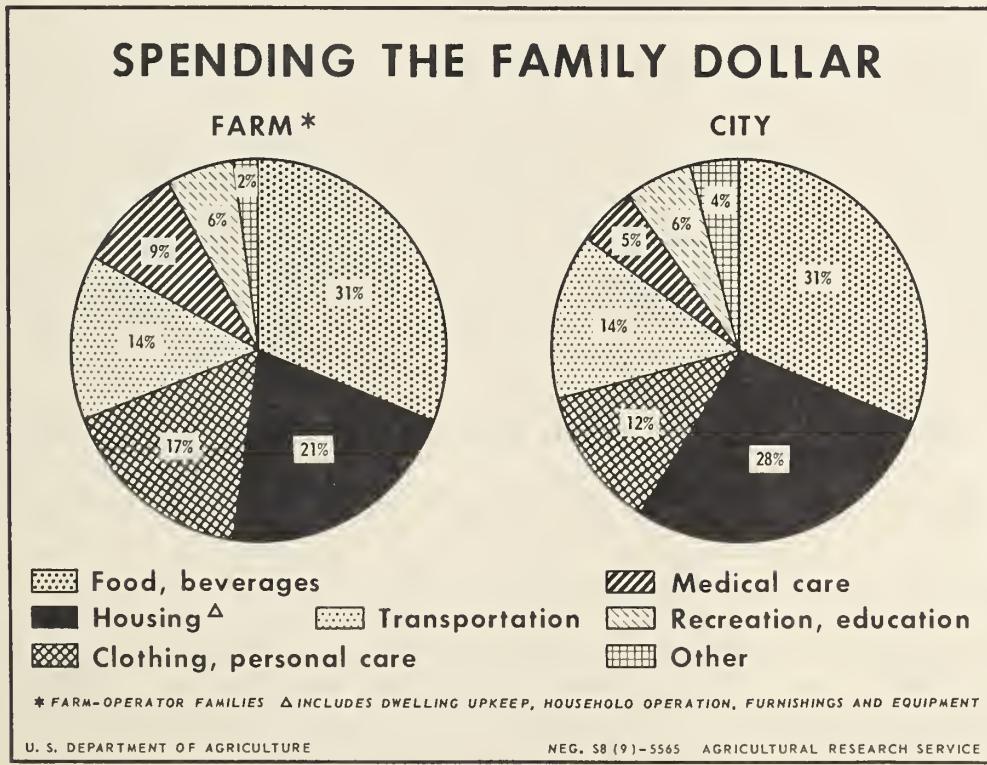
Spending for recreation, education, and reading is higher among farm families whose head has had 9 or more years of schooling than among those with less.

Conclusion

A comparison of these patterns of spending shows us that families can look forward to making certain adjustments as they progress through the marriage cycle and their economic position changes. A knowledge of what to expect can help them plan better for the future.

If a family follows the usual pattern, it can expect some increase in income during the first half of the marriage cycle. As it increases in size and the children grow older, spending for family living will increase and will be at its peak when the head of the family is between 45 and 54 years old. Clothing and personal care will rise proportionately more than total spending, and the housing categories in combination will decline in dollars spent and as a proportion of total spending.

When the children are grown and the family is reduced in size, income also generally declines. After age 55 the family's spending will fall off sharply. Clothing and recreation, education, and reading will show the sharpest declines, and the housing categories and medical care will be more important in the total.



Patterns of Spending for Current Consumption, 1955

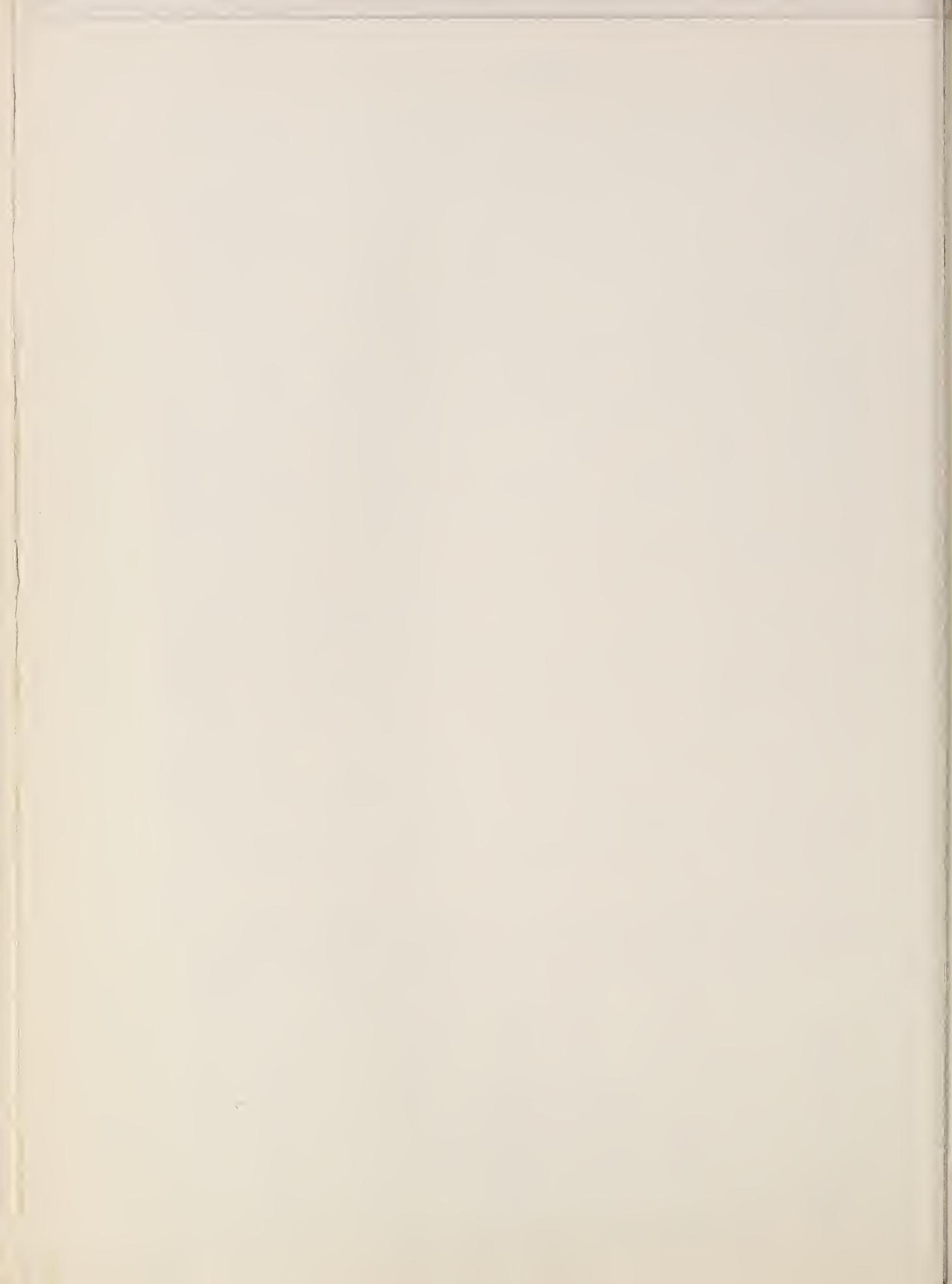
Family characteristic	Total consumption	Food and beverage	Housing				Clothing and personal care	Transportation	Medical care	Recreation, education, reading	All other				
			Total	Dwelling upkeep	Household operation	Furniture and equipment									
						Amount spent per family (dollars)									
Farm-operator families 1/...	2,759	846	579	71	289	476	376	240	163	79	155				
Urban families 2/	4,578	1,433	1,267	586	414	564	655	246	258	158	155				
4-person urban families															
By income level:															
\$1,000-\$2,000	2,870	1,010	780	350	270	160	360	140	160	90	140				
\$4,000-\$5,000	4,610	1,570	1,190	540	390	260	570	250	270	270	220				
\$7,500-\$10,000	7,690	2,240	1,950	830	660	460	1,060	400	550						
Farm-operator families 1/ (\$2,000-\$4,000 income)															
By family size:															
2 persons	2,350	650	590	110	295	185	320	375	225	115	75				
4 persons	3,150	960	640	45	330	265	560	420	270	210	90				
6 persons	3,340	1,085	650	45	320	285	610	430	250	235	80				
By age of operator:															
Under 35	2,865	870	610	10	310	290	465	415	230	185	90				
45-54	3,285	1,010	620	65	315	240	605	470	270	235	75				
65 and over	2,140	655	475	65	285	125	305	345	220	80	60				
Education of operator:															
Under 9 years	2,725	865	530	45	265	220	475	415	220	145	75				
9 years and over	3,220	945	705	70	365	350	550	410	300	225	85				

Patterns of Spending for Current Consumption, 1955--Continued

-11-

Family characteristic	Total consumption	Food and beverage	Housing			Clothing and personal care	Medical care	Recreation, education, reading	All other
			Total	Dwelling upkeep	Household operation				
Farm-operator families $\frac{1}{1}$..									
Urban families $\frac{2}{2}$	100	31	21	3	10	8	17	14	9
4-person urban families	100	31	28	13	9	6	12	14	5
By income level:									
\$1,000-\$2,000	100	35	27	12	9	6	13	11	5
\$4,000-\$5,000	100	34	26	12	8	6	12	13	6
\$7,500-\$10,000	100	29	25	11	8	6	14	17	5
Farm-operator families $\frac{1}{1}$ (\$2,000-\$4,000 income)									
By family size:									
2 persons	100	28	25	5	12	8	14	16	10
4 persons	100	30	20	1	11	8	18	13	9
6 persons	100	32	20	1	10	9	18	13	7
By age of operator:									
Under 35	100	30	21	--	11	10	16	14	8
45-54	100	31	19	2	10	7	18	14	8
65 and over	100	31	22	3	13	6	14	16	10
Education of operator:									
Under 9 years	100	32	19	2	9	8	17	15	8
9 years and over	100	29	22	2	12	8	17	13	9

 $\frac{1}{1}$ Survey of Farmers' Expenditures in 1955 by Regions adjusted for comparability with earlier surveys. $\frac{2}{2}$ Developed from the Study of Consumer Expenditures, Incomes and Savings--1950, U. S. Bureau of Labor Statistics and the Wharton School of Finance and Commerce, University of Pennsylvania, 1957.



UNITED STATES DEPARTMENT OF AGRICULTURE
Foreign Agricultural Service

WORLD SITUATION AS IT AFFECTS THE OUTLOOK FOR AGRICULTURE

By Dr. Max Myers
Administrator, Foreign Agricultural Service

In some years, world events other than agricultural are major factors in determining how much farm products the United States exports. This does not appear to be such a year. The most pronounced single influence on our agricultural exports at present is the competition we face from foreign agricultural production. This production is at high level and it is continuing to expand.

Many of us had wondered whether the recent recession in the United States might spread to other countries sufficiently to slow down our agricultural exports. Apparently this has not happened. Western Europe, Canada, and Japan are the biggest cash markets for our farm products. In these industrialized countries economic conditions have remained reasonably good. Gold and dollar assets -- that is, their ability to buy -- have improved and should not be a limiting factor for our exports. Although most countries of Asia and Latin America are in a weak gold and dollar position, this is offset in large part by the availability of our farm products to many such countries through programs such as Public Law 480.

Other factors have been taken into consideration, too. The explosive growth of world population is a strengthening trade factor because it means more potential customers every year. The fact that U. S. agricultural and trade groups and the Department of Agriculture are carrying out aggressive programs to reach new customers offers considerable long-range promise. The fact that American agriculture is an active participant in a world-wide trade agreements program and continuing strong efforts are being made to reduce foreign trade barriers provides a strong measure of stability to our agricultural trade.

We have tried, too, to appraise the effect of the unsettled world political situation on our agricultural exports. We recall that the Korean conflict caused considerable scare buying and resulted in larger agricultural exports 7 years ago. Somewhat the same thing happened, though on a smaller scale, during the Suez Canal crisis 2 years ago. Today we have the Formosa Straits situation, as well as unrest throughout the Middle East. A major effort is being made by the Communist Bloc to use trade as an economic weapon in strengthening ties with many of the lesser developed countries. There is little evidence, however, that importing countries are worried sufficiently by such developments to engage in extra buying. Apparently the Cold War is looked on as a long range development that we'll be living with for some time, and countries have not taken concrete action to build emergency stockpiles.

As a result then-- not so much of world economic and political situations as of stronger competition from foreign producers -- we foresee a probable small decline this year in total United States agricultural exports. Smaller exports of cotton will account for the bulk of the decline.

Also, we expect smaller exports of animal products (primarily dairy products), fruits, and tobacco. We look for some increase in exports of wheat, rice, vegetable oils, and oilseeds -- but not enough gains to make up for the drop in the others named.

We look for United States agricultural exports this 1959 fiscal year to total about \$3.8 billion. While this is somewhat under the \$4 billion of last year, nevertheless it would place fiscal year 1959 among the big 6 export years in our agricultural history. A total of \$3.8 billion certainly could be called a good export year. When added to the previous 2 years, it gives us a 3-year average of nearly \$4.2 billion, highest 3 years in our export history. It means that of our total cropland we are exporting the output of about 1 acre out of every 6.

One word of caution may be in order, and that is that we prognosticators don't control what actually happens. World agricultural trade these days is greatly affected by actions taken by governments, including both the United States Government and foreign governments. There is always the chance that foreign governments will become more restrictive, or become more liberal, in their import policies. Also, we in the United States Government are going to be alert and aggressive in pursuing every export possibility.

Among the enigmas of today's world are the politico-economic intentions of the Soviet Bloc. For example, Soviet Russia has been dumping flax on the European market for the past two years and this has hurt the European flax industry. With a better crop this year, the Soviet Union has increased capability of placing wheat on the world market. Communist China apparently has the wherewithall to export a good volume of rice and

soybeans. Any decisions to take such actions will depend on political as well as economic advantages to be gained. Our agricultural trade would feel the impact of any such decisions.

Foreign Agricultural Production

In discussing the individual factors that affect our exports, a good place to begin is foreign agricultural production. We are now preparing our annual World Agricultural Situation report which we will issue next month. All indications point toward stronger competition in the world market for the major commodities that we export. This is due to rather general increases in production.

World cotton production this year is not far under the record-breaking 43 million bale crop of 1955-56. This is due to favorable weather, less insect damage, and increased acreage. This season's cotton production appears to be higher than last season's not only in the United States but also in the Sudan, Egypt, Mexico, Uganda, the Soviet Union, Communist China, and a number of other countries.

On the food side, world production is expected to reach a new high this year. Growing conditions have been favorable not only in the United States but also in many other parts of the world. Foreign production of wheat, rice, sugar, soybeans, and cottonseed is forecast at record levels. Foreign production of feed grains, deciduous fruits, and citrus is up from last year. Most livestock products are also expected to show some increase.

A substantial part of the increase in foreign crop production occurred in the Soviet Union and Mainland China. The Soviet Union should have more wheat for export to non-communist countries as well as to Eastern Europe, and Mainland China could increase exports of rice and possibly soybeans.

Among the major wheat exporting countries, Australia will have much more wheat for export this year than last, when drought sharply reduced the crop. Though the 1958 Canadian crop is currently estimated at about the same level as in 1957, Canada still has large wheat stocks on hand. Prospects for an increase in the Argentine harvest are uncertain. In France, heavy rains at harvest time reduced the wheat crop both in quality and quantity.

With the French wheat crop down and a lower-than-average quality harvest in the British Isles, Western Europe will need to import more wheat, especially high quality wheat. But because an unusually large proportion of the wheat crop is suited only for feed, the need for imported feed grain may be less. Recovery of the West European fruit crop will reduce fruit import requirements.

In the Far East, the other major food importing region, most countries expect a better rice crop this year than last. Prospective increases in rice more than offset decreases in wheat. Nevertheless, wheat imports are expected to reach or exceed last year's level. Western Asia, normally a grain exporting region, has had a poor crop and will be a net importer of wheat this year. Food production is up in Northern Africa and in Mexico and most Central American countries. In most Southern Hemisphere countries, growing conditions so far this season appear to have been reasonably good.

Foreign Buying Power

Our agricultural exports are paid for in two ways: under our special Government programs and outside of such programs -- i.e., through commercial sales for dollars. Last year, our agricultural exports outside of the special programs totaled \$2.8 billion, which was 70 percent of the export total.

It is pretty obvious that the more that American agriculture can export independently of Government programs, the stronger its position. Government programs, such as Public Law 480, are performing an extremely timely function. Although useful, they cannot themselves be relied upon as solutions to our surplus production problem.

To be successful in export selling, we not only need to have products that are competitive in quality and price but also we need foreign customers who can pay for our commodities. A major indicator of foreign countries' ability to buy U.S. products is their gold and dollar holdings. By June 30 of this year, the gold and dollar assets of foreign countries had reached an all-time high of \$31.5 billion, a gain of \$1.7 billion over last year. Most of these increased gold and dollar assets accrued to the industrialized countries of Western Europe, Canada, and Japan. These countries represent our biggest customers and they are primarily cash customers. The improvement in external financial position of these major trading countries should tend to encourage further relaxation of some trade restrictions against U. S. farm products.

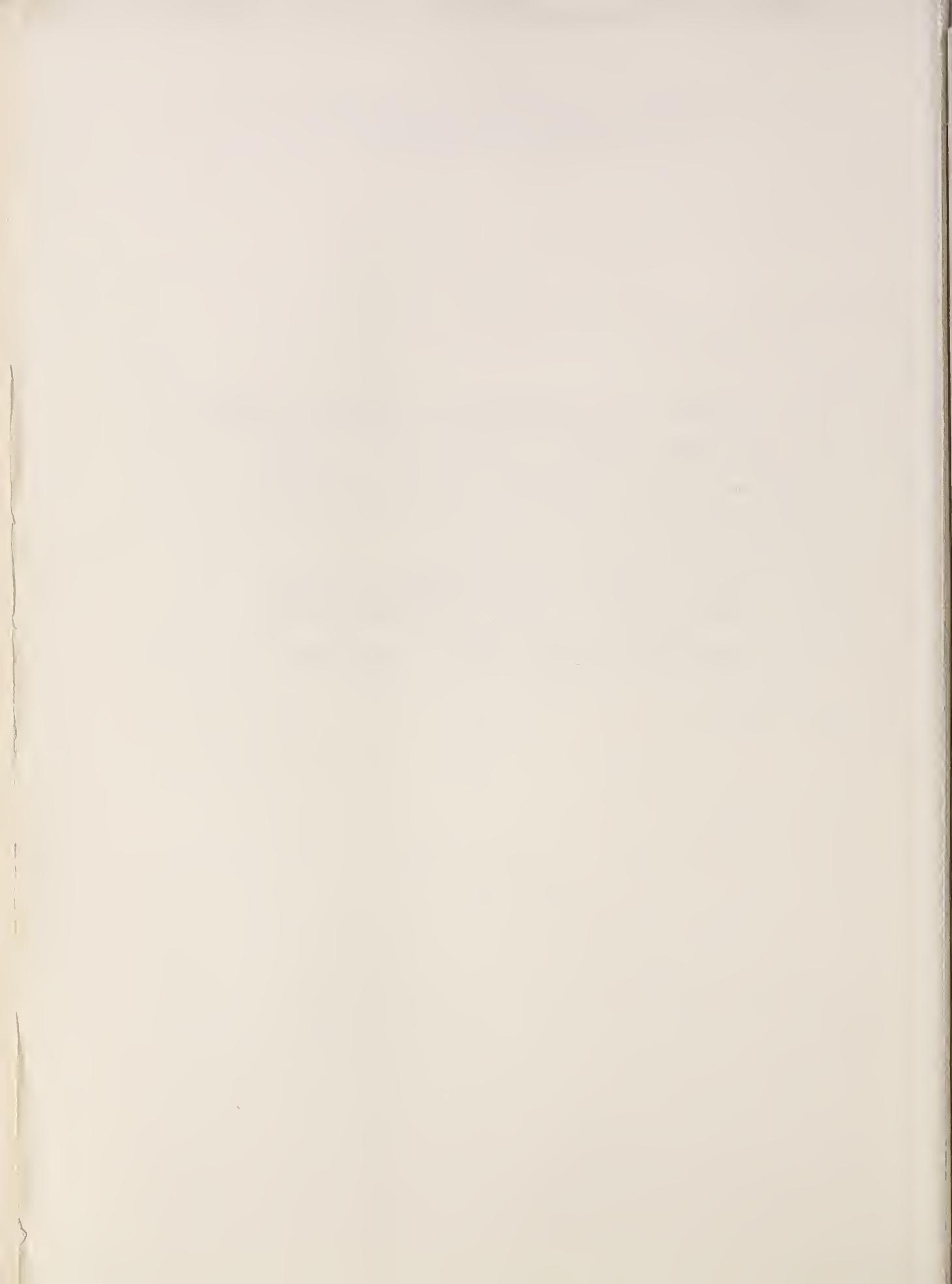
It's a different story for the rest of the world, most of which is experiencing balance of payments difficulties and declining gold and dollar reserves. In the newly developing countries where exports of primary commodities constitute the bulk of exchange earnings, the decline reflects lower export commodity prices and also internal inflationary pressures. The exchange position of many of these countries is precarious. In most of these countries, restrictions on commercial marketings of U.S. farm products will continue to be encountered. Consequently, many of them must look to special U.S. export financing programs -- such as Public Law 480 sales for local currency -- as their principal means of obtaining needed agricultural products from the United States.*

UNITED STATES DEPARTMENT OF AGRICULTURE
Foreign Agricultural Service

E R R A T U M

In the statement, "WORLD SITUATION AS IT AFFECTS THE OUTLOOK FOR AGRICULTURE," prepared for delivery by Dr. Max Myers, Administrator, FAS, at 36th Annual National Agricultural Outlook Conference, November 17, 1958:

Page 7, paragraph entitled Cotton should begin
"Exports of U.S. cotton for the marketing year
ending July 31, 1959," etc., etc. (Not 1958).



Because of the many countries that are having payments problems, we anticipate some increase -- perhaps \$100 million -- in the farm products exported under Government programs. The expected \$3.8 billion total export figure would then break down for this fiscal year into \$1.3 billion exported under Government programs, \$2.5 billion exported through commercial sales outside of Government programs. In other words, 66 percent of our agricultural exports would be outside of Government programs, which is only a 4 point decline from last year.

Effects of Imports

After World War I we ceased to be a debtor nation and the old idea of trying to export more than we import no longer was valid. Today our imports are the principal means of foreign customers earning dollars to buy our export products. American farmers have a big stake in the flow of foreign items to our shores. Without these imports, our large commercial exports of farm products would not be possible.

Total imports by the United States last year amounted to \$12.7 billion; total exports were \$18.7 billion. Total agricultural imports were \$3.9 billion; total agricultural exports were \$4.0 billion.

Our agricultural imports are of two general kinds. The bulk of agricultural imports are non-competitive -- such things as coffee, cocoa, rubber, etc. The other smaller group is made up of competitive items, like sugar, specialty meats, and livestock. It is well worth noting that these imports either come in under quota or show up in greatest volume only when our prices are high enough to attract them in.

Cotton

Exports of U.S. cotton for the marketing year ending July 31, 1958, are expected to total about 4.0 million running bales, compared with 5.7 million bales last season.

Weakened foreign demand for textiles and increased foreign supply of cotton are the major factors that are expected to bring about the decrease.

Present indications are that consumption of cotton in the foreign Free World in 1958-59, estimated at about 20 million bales, will be slightly smaller than in 1957-58 but about 1.0 million below the high level of 1956-57.

The total foreign supply of cotton in 1958-59 will be significantly larger than a year ago. Stocks in foreign exporting countries were larger at the beginning of the season and foreign production has increased. World production is likely to exceed offtake for the first time in three years, perhaps by as much as 1.0 million bales.

Grains and Feeds

Exports of wheat in fiscal year 1959 are forecast to reach at least 430 million bushels, 30 million bushels above last year. This improvement over last year can be attributed to some increase in exports under Government programs as well as crop reverses in some areas of the world. A new Public Law 480, Title I agreement signed with India in September included more than 100 million bushels of wheat. Also, Western Europe will import additional high quality wheat to replace wheat damaged by adverse weather during harvest. To a lesser degree, normal increases in requirements in many traditional markets will also play a part in increasing exports of both wheat and flour.

Exports of feed grains in the first quarter tend to indicate heavy volume again this year. However, feed wheat supplies in Europe may adversely affect import demand in that area during the remainder of this year. For this reason exports this season may be little changed from 1957-58.

The estimate of rice exports for the fiscal year is 18.9 million bags, milled basis, an increase of more than 7 million bags above last year.

Tobacco

Exports of unmanufactured tobacco for fiscal year 1959 are expected to total about 445 million pounds, export weight. This would represent a decline of 6 percent from last year, a drop of 11 percent from the previous year.

Among adverse factors, supplies of competitive tobaccos are larger and are available for export at prices lower than for similar U. S. tobaccos. U.S. prices for 1958 crop flue-cured are somewhat higher than a year ago, although not to the extent expected before auction sales began. In addition, there is the growing desire of tobacco-importing countries, particularly in Western Europe, to direct trade towards traditional trading partners through bilateral arrangements.

On the other hand, certain factors limit the decline in tobacco exports. Among them are: (1) the improved gold and dollar position of a number of foreign markets; (2) increased cigarette consumption abroad, particularly for brands containing light tobacco; and (3) a larger U.S. crop this year, with flue-cured, the major export kind, up some 100 million pounds from a year ago.

Oilseeds and Oils

A sizeable increase is expected this year in exports of edible vegetable oils. Little change is expected in exports of soybeans. A decline is expected in exports of flaxseed.

The expected larger exports of edible oils (cottonseed and soybean) would mainly reflect the heavier movement of oils which has taken place under Public Law 480 from July 1, 1958 to date.

The expected decline in flaxseed exports reflects the larger foreign supply outlook and therefore world prices that are likely to be below U.S. support levels.

Fruits

Exports of U.S. fresh and processed fruits are expected to be less this year than in 1957-58, because of reduced domestic supplies of many of the major export items. Both the U.S. canned fruit and dried fruit packs are lower than last year. Except for lemons, U.S. citrus supplies are expected to be relatively short this season. Although the 1958 U.S. apple crop is large, exports will be lower than last year because European apple crops are substantially larger than the short crops last season.

Animal Products

Total exports of animal products are expected to be down, due mainly to a decline in exports of dairy products.

Cheese exports will be down sharply, due to cheese no longer being available for programming under the foreign donation program. Exports of dry whole milk and evaporated milk will be down. Exports of butter were small last year and will continue small in terms of total production. In total, dairy exports are expected to be about \$144 million, compared with \$217 million last year.

U. S. exports of tallow and greases are expected to be maintained, or perhaps increased slightly, over the level of last year. Lard exports are expected to increase about 6 percent, reflecting a substantial gain in domestic supply. Meat exports are likely to remain small. Exports of cattle hides, calf and kip skins are expected to continue to take close to one-fourth of our production.

U. S. Agricultural Exports
Fiscal Years, Actual 1956-57 and 1957-58, Estimate 1958-59

Commodity	: 1956-57	: 1957-58	: 1958-59
Cotton	\$ 1,116	\$ 841	\$ 640
Grains and feeds <u>1/</u>	1,608	1,317	1,410
Wheat and flour <u>1/</u>	958	724	760
Feed grains <u>1/</u>	365	431	430
Rice, milled <u>1/</u>	190	98	150
Tobacco, unmanufactured	340	343	335
Vegetable oils and seeds <u>1/</u>	457	413	430
Fruits and vegetables <u>1/</u>	368	383	360
Animals and products <u>1/</u>	704	585	500
Other <u>1/</u>	135	120	125
 TOTAL	4,728	4,002	3,800

1/ Includes donations

